COURSES (O-Z)

OCCUPATIONAL THERAPY ASSISTANT

OTA 110 Introduction to Occupational Therapy (3)
3 hours lecture per week
Comment: Letter grade only. OTA 110 may not be audited. OTA 110 may not be taken credit/no credit.

OTA 110 is an introduction to the profession of Occupational Therapy. The course provides an overview of the history, philosophy, and role of Occupational Therapy in the health care environment. Discussion will involve current issues relating to the field, the framework of Occupational Therapy practice and process including practice settings and intervention approaches. The course describes the educational requirements and roles of Occupational Therapy practitioners as well as legal and ethical issues affecting practice.

Upon successful completion of OTA 110, the student should be able to:

1. Describe the health care system including global social issues affecting the system, members of the health care team and service delivery areas.
2. Recognize the importance of the history and analyze how history, theory and the sociopolitical climate influence practice.
3. Describe basic features of the framework, philosophy, models and frames of reference that underlie the practice of Occupational Therapy.
4. Discuss the need for supervisory roles, responsibilities and collaborative professional relationships between the occupational therapy assistant and the occupational therapist.
5. List the requirements for education and national and state credentialing for occupational therapy.
6. Identify the ethical and legal considerations for resolving dilemmas by applying the AOTA Code of Ethics to selected examples.
7. Describe the components of the Occupational Therapy Process relating to assessment, intervention, outcomes and service management.

OTA 111 - Foundations of Occupational Therapy Practice (1)
1 hour lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 111 may not be audited. OTA 111 may not be taken credit/no credit.

OTA 111 examines the meaning of occupation and activity through the use of the Occupational Therapy Practice Framework and applies relevant terminology to activity analysis. Students will create a portfolio that will be continued throughout their OTA program documenting learning and growth in the profession. Utilizing technology to access information, students will evaluate characteristics of occupational therapy practitioners and the importance of professional organizations and professional development.

Upon successful completion of OTA 111, the student should be able to:

1. Describe the meaning and dynamics of occupation and activity including the interaction of areas of occupation, performance skills, performance patterns, activity demands, contexts and client factors.
2. Analyze tasks relative to areas of occupation, performance skills, performance patterns, activity demands, contexts, and client factors to implement the intervention plan.
3. Apply basic computer skills including the ability to use data bases, word processing and presentation software, and search engines to access information.
4. Give examples of how the role of a professional is enhanced by knowledge of and involvement in international, national, state, and local occupational therapy associations and related professional associations.
5. Discuss strategies for ongoing professional development to ensure that practice is consistent with current and accepted standards.
6. Identify personal and professional abilities and competencies as they relate to job responsibilities.

OTA 112 OT Concepts for Pediatrics (3)

3 hours lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 112 may not be audited. OTA 112 may not be taken credit/no credit.

OTA 112 focuses on occupational therapy theory and intervention techniques most commonly addressed in the pediatric population. Models of service delivery in institutional, outpatient, school and home/community based settings are examined. Normal development, including development of occupational skills and areas is studied. The role of the occupational therapy assistant is compared to that of the occupational therapist in each setting, from the initial screening to discharge. The impact of sociocultural and socioeconomic conditions, values and lifestyle choices upon delivery of services is explored.

Upon successful completion of OTA 112 the student should be able to:

1. Identify the impacts of sociocultural, socioeconomic, and lifestyle choices and how various practice settings affect the delivery of pediatric occupational therapy service.
2. Distinguish between the role of the occupational therapist and the occupational therapy assistant in the screening, evaluation and intervention process in pediatric occupational therapy practice.
3. Discriminate between commonly seen pediatric conditions and use professional literature to make evidence-based practice decisions regarding appropriate occupation-based intervention plans based on the clients' needs.
4. Explain normal human development from birth through adolescence and its relationship with the development of occupational performance skills and areas.
5. Describe developmental, remediation, and compensation techniques for physical, cognitive, perceptual, sensory, neuromuscular and behavioral skills.
6. Demonstrate effective written, oral and nonverbal communication with colleagues in a professionally acceptable manner.

OTA 112L Pediatric Concepts Lab (1)

3 hours lab per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 112L may not be audited. OTA 112L may not be taken credit/no credit.

OTA 112L focuses on laboratory practice in those methods and techniques necessary to deliver occupational therapy services to pediatric populations. Positioning and handling, gross motor and fine motor skills development, feeding and sensory integration treatment techniques will be stressed. Student will develop skills in administering various assessment tools, client management techniques and occupational therapy interventions addressing areas of occupational performance, performance skills, performance patterns, activity demands, context(s) and client factors. Documentation methods utilized in occupational therapy settings will also be stressed.

Upon successful completion of OTA 112L, the student should be able to:

1. Gather and share data for the purpose of evaluating occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation for the pediatric client.
2. Analyze tasks relative to areas of occupation, performance skills, performance patterns, activity demands, context(s), and client factors to implement the intervention plan.
3. Select and provide direct occupational therapy interventions and procedures to enhance safety, wellness and performance in activities of daily living, instrumental activities of daily living (IADL), education, play, leisure, and social participation, supporting the intervention goals and plan as written by the OT and considering the client and contextual factors.
4. Demonstrate techniques to enable feeding and eating performance including training others in precautions while considering client and contextual factors.
5. Demonstrate the teaching-learning process with the client, caregiver, family, significant others, colleagues, other health providers, and the public to facilitate skills in areas of occupation as well as prevention, health maintenance, and safety for the pediatric client.
6. Explain the importance of using statistics, tests and measurements and document pediatric OT services to ensure accountability of service provision and meet standards for reimbursement of services.

OTA 119 THERAPEUTIC ACTIVITIES (2)

4 hours lecture/lab per week
Comment: Letter grade only. OTA 119 may not be audited. OTA 119 may not be taken credit/no credit.

OTA 119 focuses on the basic crafts and client management techniques utilized in Occupational Therapy or Activity Programs. Commonly utilized crafts will be demonstrated and fabricated, including techniques for adapting and grading. Basic client management techniques, wheelchair handling, transfers and safety considerations will be taught. Methods of instruction in the use of therapeutic activities will be practiced.

Upon successful completion of OTA 119, the student should be able to:

1. Fabricate crafts most commonly utilized in Occupational Therapy treatment and activity programs
2. Demonstrate therapeutic use of activities through grading, adapting and modifying the environment, tools, materials and occupations.
3. Use the teaching-learning process and effectively interact through written, oral and nonverbal communication with client.
4. Demonstrate competency in basic client management techniques to enhance mobility, including physical transfers, wheelchair management, and positioning.
5. Use sound judgment in regard to safety of self and others, and adhere to safety regulations.
6. Demonstrate proper maintenance and storage of various materials, equipment, tools and inventory of supplies.

OTA 125 Fieldwork Level I: Activity and Mental Health (2)
90 hours per semester
Prerequisite (s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 125 may not be audited. OTA 125 may not be taken credit/no credit. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required. Weekly practicum hours may vary to accommodate students, faculty, and health professionals.

OTA 125 is practical experience with patients/clients under the supervision of occupational therapy personnel or related professionals in which students apply knowledge gained in OTA courses. Settings include inpatient, outpatient, home/community based programs and emerging areas of practice that focus on patients/clients in activities or mental health settings. Students will observe and participate in specific tasks appropriate to their level of skills training and in accordance with on-site objectives.

Upon successful completion of OTA 125 the student should be able to:

1. Interact through written, oral and nonverbal communication with the client, family, health professionals and the public in a professional manner.
2. Apply knowledge gained in OTA courses to fieldwork experiences using logical thinking, critical analysis, problem solving, creativity and therapeutic use of self.
3. Observe and participate in selected aspects of the OT process or activity programs providing therapeutic use of occupation and activities.
4. Collaborate with qualified Occupational Therapy practitioners and designated professionals on therapeutic interventions for clients.
5. Grade and adapt tools, materials and interventions while using sound judgment in regard to safety of self and others as part of the therapeutic process for individuals and groups.
6. Document the Fieldwork experience and engage in formal evaluation of performance.

OTA 126 Critique: Fieldwork Level I/Activity and Mental Health (1)
1 hour lecture per week
Prerequisites(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 126 may not be audited. OTA 126 may not be taken credit/no credit.

OTA 126 is a discussion of student experiences in Fieldwork Level I with emphasis on problem solving, identifying ethical issues, sharing professional knowledge and insights. OTA 126 will provide an opportunity for the instructor to give feedback to students about various fieldwork situations. Students will also begin to examine and practice documentation methods for reporting Occupational Therapy services.

Upon successful completion of OTA 126 the student should be able to:

1. Demonstrate oral communication by summarizing Fieldwork I experiences during group discussion including client conditions and corresponding treatment.
2. Identify strategies for analyzing issues and making decisions to resolve personal and organizational ethical conflicts
3. Demonstrate written communication by documenting occupational therapy services effectively to ensure accountability of service provision and to communicate the need and rationale for OT services
4. Describe the ongoing professional responsibility for providing fieldwork education and the criteria for becoming a fieldwork educator
5. Discuss strategies for ongoing professional development to ensure that practice is consistent with current and accepted standards
6. Identify personal and professional abilities and competencies as they relate to job responsibilities

OTA 161 Mental Health Concepts (3)

3 hours lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 161 may not be audited. OTA 161 may not be taken credit/no credit.

OTA 161 focuses on Occupational Therapy practice relating to mental health. History, practice models and terminology used by Occupational Therapy practitioners in mental health settings will be explored. The Occupational Therapy process will be applied utilizing case studies and focus on occupational performance. Students will become familiar with concepts of group facilitation and styles of documentation. Professional literature review will focus on evidence based Occupational Therapy practice.

Upon successful completion of OTA 161, the student should be able to:

1. Describe history and basic features of the theories, models of practice, frames of reference, Code of Ethics and Standards of Practice that underlie the practice of Occupational Therapy in mental health.
2. Identify the impacts of social, economic or demographic factors and how various practice setting affect the delivery of Occupational Therapy service.
3. Distinguish between commonly referred psychosocial conditions, psychotropic drugs, and their side effects and give examples of the need to use compensatory strategies when desired life tasks cannot be performed.
4. Explain the role of the Occupational Therapy Assistant and Occupational Therapist in the screening and evaluation process along with the importance of and rationale for supervision and collaborative work.
5. Identify occupation-based intervention plans including goals and methods based on the stated needs of clients in case studies that are culturally relevant, reflective of current occupational therapy practice and identify the need for termination of Occupational Therapy services when stated outcomes have been achieved or determined they cannot be achieved.
6. Use professional literature to make evidence-based practice decisions and articulate the importance of professional research and literature in the continued development of the profession.

OTA 161L –Mental Health Concepts Lab (1)

3 hours lab per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 161L may not be audited. OTA 161L may not be taken credit/no credit.

OTA 161L provides laboratory practice for those methods and techniques necessary to deliver Occupational Therapy services for mental health populations. Students will explore common mental health conditions utilizing a research protocol and apply the teaching-learning process with peers. Gathering and sharing data for the purpose of administering selected assessments will be practiced. Students will demonstrate Occupational Therapy treatment planning and interventions addressing areas of occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation to peers. Community resources will be explored and documentation methods utilized in Occupational Therapy settings will be practiced.

Upon successful completion of OTA 161L the student should be able to:

1. Identify and implement the skills necessary to follow a research protocol and use the teaching-learning process to understand the effects of mental health, heritable diseases and predisposing genetic conditions, disability and disease for the client with mental health disorders.
2. Gather and share data for the purpose of administering selected assessments for clients with mental health disorders using appropriate procedures and considering the use of occupation for assessment.
3. Demonstrate therapeutic use of self including insights and judgments as part of the therapeutic process and grade and adapt the environment, tools, materials, occupations, and interventions to reflect the changing needs of the client during group leading.
4. Select and provide occupational therapy interventions and procedures to enhance safety, wellness and occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation for clients with mental health disorders.
5. Document Occupational Therapy services to effectively communicate the rationale for services and to ensure accountability of service provision and to meet standards for reimbursement.
6. Identify community resources to develop and promote the use of appropriate home and community programming for clients with mental health disorders.

OTA 172 Management Concepts (3)

3 hours lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 172 may not be audited. OTA 172 may not be taken credit/no credit.

OTA172 focuses on the development of management skills for the occupational therapy assistant in traditional roles and non-traditional roles in emerging areas of practice. Program development, budgeting, marketing, scheduling, implementation and evaluation for continuous quality improvement will be discussed. Emerging areas of practice will be identified by analyzing community needs and studying trends in current and new areas.

Upon successful completion of OTA 172 the student should be able to:

1. Explain the role of occupation in the promotion of health, wellness and the prevention of disease and disability for the individual, family, and society within occupational therapy's scope of practice.
2. Explain occupational therapy and identify strategies to assist the consumer in gaining access to services by educating other professionals, service providers, consumers and the public.
3. Describe the role and professional responsibilities of the occupational therapy assistant in care coordination, case management, and transition services in traditional and emerging practice environments, and when services are provided on a contractual basis.
4. Assist with the collection, organization and reporting on data for evaluation of practice outcomes.
5. Identify the varied roles and responsibilities of the OTA as a practitioner, educator, and research assistant in addressing change in service delivery policies, to effect changes in the system and to recognize opportunities in emerging practice areas.
6. Assist with the development, marketing, and management of service delivery options, and identify the impact of contextual factors on the management and delivery of services.
7. Identify the mechanisms, systems and techniques needed to properly maintain, organize, and prioritize workloads and intervention settings including inventories, scheduling, budgeting, documentation, and evaluation for continuous quality improvement.

OTA 224 Health Concepts for the Elderly (3)

4.5 hours lecture per week for 10 weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 224 may not be audited. OTA 224 may not be taken credit/no credit.

OTA 224 is the study of occupational therapy concepts to improve occupational performance for the elderly as they age at home and in the community. This course focuses on demographic trends, theories of aging, common conditions and occupational therapy practice models. The influence of lifestyle on health and wellness, as well as, public policy and advocacy for the elderly will be examined. The role of the COTA working with families and caregivers to delivery services for the elderly who face a variety of challenges due to aging or disability will be discussed. Best practice strategies for the prevention of injury and promotion of health in a variety of settings to address quality of life issues will be explored.

Upon successful completion of OTA 224 the student should be able to:

1. Identify potential impacts of social, economic, political, geographic or demographic factors on the practice of occupational therapy.
2. Describe the contexts of health care, education, community and social models or systems that create federal and state legislation and regulation as they relate to the practice of occupational therapy with the elderly.
3. Describe the effects of physical and mental health, heritable diseases and predisposing genetic conditions, disability and disease processes to occupational performance of the individual and within the context of family.
4. Explain the importance of balancing areas of occupation, the achievement of health and wellness, as well as the support of quality of life for the elderly individual, group or population relating to occupational therapy practice and promoting health and injury prevention.
5. Describe the meaning and dynamics of occupation and activity including the interaction of areas of occupation, performance skills, performance patterns, activity demands, context and client factors as it relates to best practice for the elderly in various settings.
6. Evaluate the use of home and community programming to support performance in the client's natural environment and participation in all contexts relevant to the elderly client.

OTA 224L Elderly Concepts Lab (1)

4.5 hours lab per week for 10 weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 224L may not be audited. OTA 224L may not be taken credit/no credit.

OTA 224L focuses on the practice of those methods and techniques necessary to deliver occupational therapy services to the elderly with an emphasis on home and community programming. Students will administer selected assessments, develop intervention plans and practice skills to promote health and safety, prevent disease or disability in this population. Strategies for modifying environments and processes and reassessing activities of daily living (ADL) and instrumental activities of daily living (IADL) interventions will be taught. Methods for educating and training caregivers and family to facilitate occupational performance in elderly clients will be learned and practiced.

Upon successful completion of OTA 224L, the student should be able to:

1. Gather, share data and administer selected assessments for the purpose of evaluating client's occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, leisure and social participation.
2. Develop occupation based intervention plans from data gathered that are culturally relevant and reflective of current occupational therapy practice in various settings for the elderly.
3. Select direct interventions utilizing occupation and activities for the elderly to enhance safety, wellness and prevent disease or disability, as well as activities of daily living (ADL) and instrumental activities of daily living (IADL), education, work, leisure and social participation.
4. Demonstrate strategies to educate and train the elderly client, caregiver, family and significant others to facilitate skills in areas of occupation, as well as prevention of disease and disability, health maintenance and safety.
5. Modify environments, adapt processes and teach compensatory strategies for the elderly in home management, community mobility including issues related to driving.
6. Reassess the effects of occupational therapy intervention, modify interventions and communicate the client's needs to other occupational therapy practitioners, caregivers and the family.

OTA 232 Fieldwork Level I: Physical Dysfunction/Developmental/Educational (2)

90 hours per semester
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 232 may not be audited. OTA 232 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required.

OTA 232 is supervised practical experience with occupational therapy personnel or related professionals in which students apply knowledge gained in OTA courses. Settings include inpatient, outpatient, home/community-based programs and emerging areas of practice that focus on patient/clients in physical dysfunction/rehabilitation, or in an early intervention or school based programs. Following on-site objectives, students will observe and participate in specific interventions appropriate to their skill level for 90 hours. Professional conduct is expected and performance will be documented and evaluated.

Upon successful completion of OTA 232 the student should be able to:

1. Interact through written, oral and nonverbal communication with the client, family, significant others, colleagues, other health professionals and the public in a professionally acceptable manner.
2. Apply knowledge gained in OTA courses using knowledge of AOTA Code of Ethics, Core Values and Standards of Practice to educate the client, caregiver, family and significant others and to facilitate skills in areas of occupation, prevention and health maintenance.
3. Explain the role of the occupational therapy assistant and occupational therapist in screening, evaluation and intervention and the importance of the rationale for supervision and collaborative work.
4. Observe and participate in selected aspects of the OT process in physical dysfunction/rehabilitation or in an early intervention or school based program appropriate to their skill level such as training in self-care, mobility, transfers, feeding and eating or fabrication of orthotic devices.
5. Teach compensatory strategies through the use of technology, prosthetics or adaptations to the environment and use sound judgment in regard to safety of self and others.
6. Document the Fieldwork experience and engage in formal evaluation of performance.

OTA 233 Critique: Fieldwork Level I: Physical Dysfunction and Developmental/Educational (1)

1 hour lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 233 may not be audited. OTA 233 may not be taken credit/no credit.

OTA 233 is a discussion of student experiences in OTA232 Fieldwork Level I with emphasis on problem solving, identifying ethical issues, sharing professional knowledge and insights. This course will provide an opportunity for the instructor to give feedback to students about inpatient, outpatient, home/community based programs and emerging areas of practice that focus physical dysfunction/rehabilitation or early intervention or school based programs. Students will continue to examine and practice documentation methods for reporting Occupational Therapy services.

Upon successful completion of OTA 233 the student should be able to:

1. Demonstrate oral communication proficiency by summarizing Fieldwork I experiences during group discussion including client conditions and corresponding treatment.
2. Identify strategies for analyzing issues and making decisions to resolve personal and organizational ethical conflicts.
3. Demonstrate written communication proficiency by documenting occupational therapy services effectively to ensure accountability of service provisions and to communicate the need and rationale for OT services.
4. Describe the ongoing professional responsibility for providing fieldwork education and the criteria for becoming a fieldwork educator.
5. Discuss strategies for ongoing professional development to ensure that practice is consistent with current and accepted standards.
6. Identify personal and professional abilities and competencies as they relate to job responsibilities.

OTA 236 Fundamentals of Assistive Technology (3)

3 hours lecture per week
Prerequisite(s): Acceptance into Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 236 may not be audited. OTA 236 may not be taken credit/no credit.

OTA 236 focuses on the provision of assistive technology and orthotics for individuals with physical disabilities. Information presented includes terminology, models, assessment, regulation, funding and roles of practitioners. Students will become familiar with basic principles relating to electronic enabling devices, augmentative and alternative communication, input and output options, low technology devices, technologies for keyboarding and wheelchairs. Basic principles of work rehabilitation will be explored including interventions and compensatory strategies for ergonomics, thermal modalities and splints that facilitate occupational performance.

Upon successful completion of OTA 236 the student should be able to:

1. Define terms associated with assistive technology including rehabilitation technology, universal design, assistive technology practitioner, assistive technology supplier and various AT devices and equipment.
2. Select data for screening and evaluation of client factors that indicate assistive technology, work or orthotic needs.
3. Identify intervention plans and strategies that utilize principles of assistive technology and AT devices, as well as orthotic and ergonomic concepts to facilitate occupational performance.
4. Explain compensatory strategies, such as the use of technology, adaptations to the environment and involvement of humans and nonhumans in the completion of tasks.
5. Identify principles of superficial thermal and mechanical modalities and recognize their use as preparatory measures to improve occupational performance.
6. Give examples of various reimbursement systems and documentation requirements that affect occupational therapy practitioners in the provision of assistive technology.

OTA 236L Assistive Technology Lab (1)

3 hours lab per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 236L may not be audited. OTA 236L may not be taken credit/no credit.

OTA 236L focuses on those methods and techniques necessary to delivery Occupational Therapy services utilizing assistive technology and orthotics. Students will grade and adapt wheelchair seating and mobility options, recommend and fabricate low technology assistive devices and switches. Students will participate in splint fabrication and application of selected superficial thermal modalities and ergonomic principles. Community resources will be explored.

Upon successful completion of OTA 236L, the student should be able to:

1. Modify environments and adapt processes by applying a variety of low technology assistive devices and ergonomic principles.
2. Demonstrate strategies using assistive technology and devices including electronic aids and seating systems to enhance occupational performance.
3. Demonstrate fabrication, application, fitting and training in orthotic devices including splints to enhance occupational performance.
4. Demonstrate grading and adapting the environment, tools, materials, occupations and interventions to reflect the changing needs of the client and the sociocultural context.
5. Demonstrate safe and effective administration of superficial thermal and mechanical modalities to achieve established goals while adhering to contraindications and precautions.
6. Identify community resources and strategies to promote the profession and assist the consumer in gaining access to occupational therapy services.

OTA 237 Physical Dysfunction Concepts (3)

3 hours lecture per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 237 may not be audited. OTA 237 may not be taken credit/no credit.

OTA 237 focuses on physical dysfunction conditions seen in adults most commonly referred to occupational therapy and applicable occupational therapy theory and interventions. Models of service delivery in inpatient, outpatient, and home/community based are examined as well as OT theories and frames of reference. The impact of sociocultural and socioeconomic conditions, values, and lifestyle choices upon delivery of services is explored.

Upon successful completion of OTA 237, the student should be able to:

1. Define occupational therapy theories, models and frames of reference and related terminology.
2. Describe the effects of physical and mental health, heritable diseases and predisposing genetic conditions, disability, disease processes, and traumatic injury to the individual within the cultural context of family and society on occupational performance.
3. Define the impact of sociocultural, socioeconomic, and lifestyle choices upon delivery of services in various practice settings and give examples of a variety of systems and models of service delivery as they relate to adult physical dysfunction conditions.
4. Identify development, remediation, and compensation techniques for enhancing physical, cognitive, perceptual, sensory, neuromuscular and behavioral skills in the physical dysfunction settings.
5. Identify documentation methods appropriate to area of service, recommend the need for termination of services when stated outcomes have been achieved or they cannot be achieved and when to recommend to the occupational therapist the need for referring clients for additional evaluation.
6. Describe the need for supervisory roles, responsibilities and collaborative professional relationships between the occupational therapist and occupational therapist assistant during the OT Process in the physical dysfunction settings.

OTA 237L Physical Dysfunction Concepts Lab (1)

3 hours lab per week
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 237L may not be audited. OTA 237L may not be taken credit/no credit.

OTA 237L focuses on those methods and techniques necessary to delivery occupational therapy services in the area of adult physical dysfunction. Evaluation, treatment intervention planning, safety precautions, community resources, documentation and basic functional rehabilitation strategies will be the primary emphasis.

Upon successful completion of OTA 237L, the student should be able to:

1. Administer the most common used evaluation tools for physical dysfunction assessment and use occupation for the purpose of assessment.
2. Assist with the development of occupationally based intervention plans and strategies, including goals and methods to achieve them, based on the stated needs of the client as well as data gathered during the evaluation process.
3. Display competency and safety in providing training in techniques to enhance mobility and function, including physical transfers, dressing, and therapeutic exercises.
4. Explain the need for and demonstrate the proper use of compensatory strategies when desired life tasks cannot be performed and identify community resources in order to facilitate discharge planning, incorporating the needs of the client and significant others involved.

5. Display proficiency in documentation appropriate to each treatment area to meet standards for reimbursement of services.
6. Demonstrate the ability to educate the client, caregiver, family and significant others to facilitate skills in areas of occupation, prevention, health maintenance, and safety.

OTA 249 Professional Concepts (2)

3 hours lecture per week for 10 weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 249 may not be audited. OTA 249 may not be taken credit/no credit.

OTA 249 reinforces those concepts and principles regarding professionalism for the occupational therapy assistant in the delivery of services. Advocacy for the consumer and the profession will be explored and applied through knowledge of the legislative process, professional organizations and social conditions impacting service delivery. Basic tenets of professional behavior, values, and ethics will be discussed. Case studies will be reviewed to reinforce the occupational therapy process and clinical reasoning skills in preparation for Fieldwork II and the national certification exam.

Upon successful completion of OTA 249, the student should be able to:

1. Identify the systems and structures that create federal and state legislation and regulation and their implications and effects on practice, including knowledge of national requirements for credentialing, licensure, certification or registration under state laws.
2. Articulate the influence of social, economic, political, geographic or demographic factors and the ethical context in which humans choose and engage in occupations, on the practice of Occupational Therapy.
3. Demonstrate a knowledge and understanding of the AOTA Code of Ethics (including the informal and formal ethical dispute resolution systems), Core Values and Attitudes of Occupational Therapy Practice and AOTA Standards of Practice, as a guide for professional interactions, client interventions and employment settings.
4. Distinguish between the roles and supervisory levels of the OTR, COTA and non-professional personnel to ensure effective, competency-based, legal and ethical supervision, and professional relationships.
5. Use professional literature to make evidence-based decisions in collaboration with the occupational therapist that are supported by research.
6. Explain and give examples of how the role of the professional is enhanced by knowledge of and involvement in international, national, state and local Occupational Therapy Associations and related professional associations.

OTA 249L Professional Concepts Lab (1)

4.5 hrs lab per week for 10weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 249L may not be audited. OTA 249L may not be taken credit/no credit.

OTA 249L focuses on those methods and techniques necessary to develop professionalism. Students will advocate for the profession through participation in the legislation process and by addressing local or global health issues. Professional development strategies for national certification exam and employment will be demonstrated. Clinical observation and reasoning skills will be applied through participation in real life treatment scenarios in OT practice settings.

Upon successful completion of OTA 249L, the student should be able to:

1. Articulate to consumers, regulatory boards, policy makers, other audiences and the general public both the unique nature of occupation as viewed by the profession and the value of occupation to support participation in context(s) for the client.
2. Demonstrate knowledge of local and global social issues, including prevailing health and welfare needs and identify the role and responsibility of the practitioner to address changes in service-delivery policies to effect changes in the system.
3. Identify strategies for ongoing professional development, including demonstrating personal and professional abilities and competencies as they relate to job responsibilities, to ensure that practice is consistent with current and accepted standards.
4. Demonstrate professional advocacy by participating in Occupational Therapy or community organizations and/or agencies promoting the profession.
5. Identify how various practice settings affect the deliver of Occupational Therapy services to clients.
6. Facilitate discharge planning by identifying the needs of the client, caregiver, family and significant others; resources; and discharge environment, including community, human and fiscal resources, recommendations for environmental adaptations and home programming.

OTA 270 Fieldwork Level II A (6)

40 hours practicum per week for 8 weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 270 may not be audited. OTA 270 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required.

OTA 270 is work experience in one area of occupational therapy practice under the supervision of a registered occupational therapist (OTR) or a certified occupational therapy assistant (COTA). Students will be involved in phases of the occupational therapy process and follow the operating procedures of the affiliation site. Students will develop clinical reasoning skills, ethical practice, professionalism, and entry-level competency.

Upon successful completion of OTA 270, the student should be able to:

1. Gather and share data for the purpose of screening and evaluation, utilizing specified screening tools; assessments; skilled observations; checklists; histories; consultations with other professionals; and interviews with client, family, and significant others.
2. Assist with the development culturally relevant occupation-based intervention plans and strategies based on current occupational therapy practice, the stated needs of the client and data gathered during the evaluation process.
3. Select and apply direct occupational therapy interventions and procedures to enhance safety, wellness and performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work play, leisure and social participation.
4. Collaborate with occupational therapists on therapeutic interventions, recognizing and communicating the need to refer to specialists for consultation and intervention.
5. Document occupational therapy services to ensure accountability of service provision to meet standards for reimbursement of services and effectively communicate the need and rationale for services.
6. Monitor and reassess the effect of occupational therapy and the need for continued or modified intervention in collaboration with the client, caregiver, family, significant others.

OTA 271 Fieldwork Level II B (6)

40 hours practicum per week for 8 weeks
Prerequisite(s): Acceptance into the Occupational Therapy Assistant program.
Comment: Letter grade only. OTA 271 may not be audited. OTA 271 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required.

OTA 271 is the final course in the Occupational Therapy Assistant curriculum. Students work in an occupational therapy setting under the supervision of a registered occupational therapist (OTR) or a certified occupational therapy assistant (COTA) providing OT services to a client population different from that experienced in OTA 270. Students become involved in phases of the occupational therapy process under the operating procedures of the affiliation site to achieve entry-level competency. Upon satisfactory completion of this course, the student is eligible to sit for the national certification exam given by the National Board of Certification for Occupational Therapy (NBCOT).

Upon successful completion of OTA 271, the student should be able to:

1. Gather and share data for the purpose of evaluating client(s)' occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation, articulating the role of the occupational therapist and assistant in this process.
2. Assist with the development culturally relevant occupation-based intervention plans and strategies based on current occupational therapy practice, the stated needs of the client and data gathered during the evaluation process.
3. Collaborate with occupational therapists on therapeutic interventions, and under their direction, demonstrate the consultative process with specific consumers and consumer groups.
4. Select and apply direct occupational therapy interventions and procedures to enhance safety, wellness and performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work play, leisure and social participation.
5. Facilitate discharge planning by identifying the needs, resources and discharge environment of the client, caregiver, family and significant others, to the occupational therapist and others involved.
6. Document occupational therapy services to ensure accountability of service provision to meet standards for reimbursement of services and effectively communicate the need and rationale for services.

OCEANOGRAPHY

OCN 201 Science of the Sea (3) KCC AA/DP and KCC AS/NS
3 hours lecture per week
Prerequisite(s): MATH 25 or higher level mathematics course or higher level math placement.

OCN 201 is a survey of the science of oceanography involving the study of the geological, physical, chemical, and biological properties of the ocean with emphasis on the importance of the ocean to man. Ecology and the natural resources of the ocean are other topics discussed.

Upon successful completion of OCN 201, the student should be able to:

1. Use the metric system and scientific notation.
2. Describe the composition of seawater and methods of analyzing salinity.
3. Describe the interactions between atmosphere and ocean in terms of heat and water budgets, and the effects these interactions have on temperature and salinity of ocean waters.
4. Classify the major ocean currents.
5. Describe the forces responsible for surface currents, deep ocean currents, geostrophic currents, Ekman transport of surface waters and tides.
6. Describe the relationships between all variables used in describing ocean waves.
7. Explain the physical factors which influence life in the oceans.
8. Explain the parameters used in quantifying bio-productivity in the oceans.
9. Explain the concept of density and its regulatory effects on the circulation of air and water systems.
10. Describe all major features of the ocean floor.
11. Explain using examples how the plate tectonics theory accounts for current locations of continents, earthquakes, mountain building, island chain creation and seafloor features.
12. Account for, in chemical terminology, the anomalous properties of seawater.

PACIFIC ISLANDS STUDIES

PACS 108 Pacific Island Worlds: Today & Tomorrow (3) KCC AA/DS, KCC AS/AH and KCC AS/SS
3 hours lecture per week
Recommended Preparation: HWST 107.

PACS 108 is an introduction to the contemporary Pacific islands region and cultures through a survey of the major dilemmas facing its inhabitants now and in the near future.

Upon successful completion of PACS 108, the student should be able to:

1. Locate and name the island groups, geographic regions, and political entities of Oceania.
2. Describe social and cultural similarities and differences among Pacific Island societies.
3. Identify themes in the works of Pacific Island artist and writers.
4. Discuss contemporary social, political, economic, cultural, and environmental issues in the Pacific Islands.
5. Explain significant themes in indigenous, colonial, and postcolonial histories of the Pacific Islands.

PACS 257 Literature of Oceania (3) KCC AA/DL and KCC AS/AH
3 hours lecture per week
Prerequisite(s): Completion of ENG 100, ENG 160 or ESL 100 with a grade of "C" or higher.
Recommended Preparation: HWST 107 or PACS 108 with a grade of "C" or higher.

PACS 257 is a study of selected works of the literature of Oceania created in the 19th and 20th centuries outside Hawai‘i. Students will focus on the interaction between and among people from across Oceania through these works. Themes such as place and identity, cultural norms and ideals, and responses to change: assimilation, alienation, and issues of nationalistic movements in Oceania will be discussed.

Upon successful completion of PACS 257, the student should be able to:

1. Demonstrate knowledge of some of the authors of 19th and 20th century in Oceania, from a range of ethnic and cultural groups.
2. Recognize the universality in human experience, as well as the qualities that make a particular ethnic or cultural group distinct.
3. Recognize the diversity of literary opinions, conflict and commonality in relationship to cross-cultural perspectives in Oceania.

PACS 273 Language and Culture of Polynesia (3) KCC AA/DH and KCC AS/AH (Inactive)
3 hours lecture per week
Prerequisite(s): ENG 100; HAW 102, fluency in a Polynesian language, or instructor's consent.
Recommended Preparation(s): HWST 100 or PACS 108.
Comment: PACS 273 is currently inactive.

PACS 273 uses the indigenous languages of Polynesia as the primary vehicle to explore and examine the aboriginal cultures of the region.

Upon successful completion of PACS 273, the student should be able to:

1. Identify and locate the major islands and island groups of Polynesia.
2. Explain the fundamental similarities and differences of aboriginal Polynesian cultures.
3. Describe the evolution of Polynesian languages and their current relationships to each other.
4. Identify the major issues facing aboriginal languages of the region today.

PHARMACOLOGY

PHRM 110 Basic Clinical Pharmacology (2)
A total of 30 hours lecture.
Prerequisite(s): A grade of "C" or higher in ZOOL 141; a grade of "C" or higher in HLTH 110 or 125; a grade of "C" or higher or concurrent enrollment in ZOOL 142. Prerequisites may be waived by the instructor.
Comment: Letter grade only. PHRM 110 may not be taken credit/no credit. PHRM 110 may not be audited.

PHRM 110 covers the broad scope of pharmacology including definitions, drug standards, classification, legislation of drugs and administration of drugs; survey of medications commonly used in the prevention, diagnosis, and treatment of diseases, with discussion of pharmacological action, side effects, and related responsibilities.

Upon successful completion of PHRM 110, the student should be able to:

1. Identify major drug classifications and common drugs within each classification.
2. Interpret abbreviations and symbols accurately as they relate to drug administration.
3. Explain standards and legislation related to selected drugs.
4. Use appropriate references for obtaining drug information.
5. Identify drugs commonly used in the prevention, diagnosis, and treatment of common diseases affecting body systems (action, side effect, and related responsibilities).
6. Recognize major factors which affect drug action.
7. Identify commonly used immunizations for the prevention of specific diseases.
8. Identify major drug classifications, and common drugs within each classification, used in treatment of specific infectious disease conditions.
9. Identify major drug classifications, and drugs within each classification, commonly used in treatment of specific disease conditions encountered in the medical office.
10. Cite specific action, side effects, and responsibilities related to use of all pharmaceuticals discussed in class.

PHRM 115 Administration of Medications (1) Spring, Summer
4 hours lecture/lab per week for eight weeks
Prerequisite(s): Acceptance into the Medical Assisting program; a grade of "C" or higher in PHRM 110 or program director consent.
Comment: PHRM 115 is offered in the spring and summer semesters only. Letter grade only. PHRM 115 may not be audited. PHRM 115 may not be taken credit/no credit.

PHRM 115 provides instruction in the application of basic concepts required for medication administration: choice of equipment, proper technique, hazards and complications, patient care; satisfactory performance of intramuscular, subcutaneous, and intradermal injections; preparation and administration of oral medications; immunizations.

Upon successful completion of PHRM 115, the student should be able to:

1. Apply the basic concepts required for medication administration.
2. Solve conversion problems within and among the following systems: household, metric, and apothecary
3. Interpret abbreviations and symbols accurately as they relate to drug administration.
4. Explain legislation relating to drug administration.

5. Correctly perform pharmaceutical calculations.
6. Apply the specific rules of safe drug administration.
7. Correctly apply/ administer oral, ophthalmic, otic, nasal, and parenteral drugs in simulated lab situations.

PHRM 203 General Pharmacology (3)
3 hours lecture per week
Prerequisite(s): ZOOL 141; ZOOL 142.
Recommended Preparation: Chemistry.
Comment: PHRM 203 may be audited with the instructor's permission. PHRM 203 cannot be taken CR/NC.

PHRM 203 is a general pharmacology course that includes discussion of the major categories of drugs, their mechanism of action, toxicity, administration considerations, and uses. This course is intended for nursing students and students in the other health occupations.

Upon successful completion of PHRM 203, the student should be able to:

1. Define "pharmacodynamics" and identify factors which affect the pharmacodynamics of drugs used in the maintenance of health and the prevention and treatment of illness.
2. Identify the major categories of drugs used for the major body systems and functions.
3. For each of the above categories, identify the primary physiologic actions, pharmacodynamic interactions, and pharmacotherapeutic applications, including administration considerations.
4. Describe major current developments in drug therapy.
5. Describe the ethical and legal responsibility in the administration of drugs for the nurse and other health personnel.

PHILOSOPHY

PHIL 100 Introduction to Philosophy (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Credit in or qualification for ENG 100, ENG 160, or ESL 100.

PHIL 100 offers a survey of various methods, values, and types of philosophies.

Upon successful completion of PHIL 100, the student should be able to:

1. Recognize and distinguish the major worldviews that have dominated and sometimes polarized philosophy.
2. Reflect upon and discuss the major thinkers and the major concerns of philosophy, such as the problem of God, the nature of reality, the nature of self, ethical concerns, problems of truth, and problems of meaning.
3. Discuss contemporary philosophical trends and conflicts.
4. Reflect upon their own worldview and value system.
5. Express ideas and opinions clearly in writing.

PHIL 101 Introduction to Philosophy: Morals & Society (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Credit in or qualification for ENG 100 or 160, or ESL 100.

PHIL 101 will introduce philosophical problems and methods, emphasizing issues and questions in contemporary society: what is human happiness? What are our rights and responsibilities? How should we address issues of life and death?

Upon successful completion of PHIL 101, the student should be able to:

1. Explain the major views that have defined philosophical debate on ethical matters to include: virtue ethics, Egoism, Utilitarian theory and Deontological theory.
2. Demonstrate awareness of the key positions brought forward by philosophers on such topics as the nature of the human good, the question of the good life, the nature and problematic of human moral obligation, the tension between moral relativism and moral absolutism.
3. Explain one's understanding of cultural differences in the areas of moral and social value as applied to contemporary issues.
4. Apply critical reasoning and use ethical concepts in the analysis of contemporary ethical problems.
5. Articulate one's own personal moral perspective and defend one's own moral point of view with respect to specific issues of contemporary concern.

6. Express ideas and opinions clearly, orally and in writing.
7. Demonstrate understanding of how contemporary philosophical debate can shape the discussion of contemporary ethical problems and concerns.

PHIL 102 Introduction to Philosophy: Asian Traditions (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Credit in or qualification for ENG 100, ENG 160, or ESL 100.

PHIL 102 is a survey of major themes and schools of Asian Philosophy.

Upon successful completion of PHIL 102, the student should be able to:
1. Critically reflect upon and articulate their ideas about reality.
2. Investigate major issues in Asian philosophy.
3. Describe major contrasts between Asian and Western thought.
4. Recognize the methods of philosophical reflection.
5. Make informed choices about personal value systems.
6. Use the vocabulary of Asian philosophical issues.
7. Discuss characteristics of the major schools of Asian philosophy.
8. Discuss the development of schools of Asian philosophy and their occasional influence on each other.
9. Draw inferences from the influence of Asian philosophy on the West.
10. Express ideas and opinions clearly in writing.

PHIL 103 Introduction to Philosophy: Environmental Philosophy (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Prerequisite(s): ENG 100.

PHIL 103 offers a critical examination of environmental issues: analyzing the qualities and characteristics of human beings, the qualities and characteristics of nature in general, and the relationship and responsibilities of human beings vis-a-vis nature.

Upon successful completion of PHIL 103, the student should be able to:

1. Summarize key metaphysical and epistemological assumptions underlying different cultural conceptions of humans and nature.
2. Critically discuss cultural differences in views about the proper relationship between humans and the natural environment.
3. Identify a range of contemporary ecological problems impacting the local environment and offer concrete ideas on possible solutions.
4. Discuss underlying values and implications in the notions of land health and land ethics and apply these concepts to specific environmental problems or successes.
5. Clearly articulate a reflective point of view regarding personal responsibility on a range of ecologically important issues.

PHIL 110 Introduction to Deductive Logic (3) KCC AA/FS
3 hours lecture per week
Prerequisite(s): Qualification for ENG100, ENG 160 or ESL 100.

PHIL 110 is an introductory course in logic focusing on methods and principles of deductive reasoning. Integral to this study will be the presentation of methods for representing logical form and the development of a system of inference rules and strategies that allow for the analysis and evaluation of deductive arguments.

Upon successful completion of PHIL 110, the student should be able to:

1. Use logical languages of Sentential and Predicate to translate arguments into and out of symbolic notation, supplying language keys as necessary.
2. Employ a basic system of Inference Rules to present well constructed proofs of validity for symbolized arguments.
3. Correctly introduce and follow protocols governing the use of assumptions in deductive reasoning.
4. Construct and read truth tables for arguments, statements and sets of statements, to include demonstrating (in)validity and (in)consistency.
5. Explain the different criteria for assessing the quality of arguments and the particular importance of argument structure among these criteria.

PHIL 211 History of Western Philosophy I (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Prerequisite: Qualification for ENG 100, ENG 160, or ESL 100, or a previous college-level course in Philosophy.
Recommended Preparation: Credit in ENG 100, ENG 160, or ESL 100, or a previous college-level course in Philosophy.

PHIL 211 is about the history of Western Philosophy from ancient Greece.

Upon successful completion of PHIL 211, the student should be able to:

1. Recognize the major lines of debate that have defined the development of ancient Western philosophy.
2. Describe and critically assess the positions of key philosophical thinkers and philosophical schools, to include those of Plato and Aristotle.
3. Apply analytic techniques to express one's opinions clearly, as they apply to concepts and arguments of the periods and philosophers studied.

PHIL 213 History of Western Philosophy II (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100, ENG 160, or ESL 100, or a previous college-level course in Philosophy.
Recommended Preparation: Credit in ENG 100, ENG 160, or ESL 100, or a previous college-level course in Philosophy.

PHIL 213 surveys major philosophical thinkers and ideas from the Renaissance to the present.

Upon successful completion of PHIL 213, the student should be able to:

1. Identify key questions and responses to major controversies in epistemology, metaphysics, and ethics in the modern period.
2. Explain and critically assess the arguments put forward by specific philosophers studied in the course.
3. Express one's opinions clearly, in writing, about philosophers and arguments studied, using appropriate analytic techniques.

PHIL 250 Ethics in Health Care (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Credit or concurrent enrollment in ENG 100 or ENG 160.

PHIL 250 is an exploration of basic ethical theories and their application to ethical dilemmas with discussion of various methods of decision-making. It engages students in the critical analysis of the ethical dimensions of health care.

Upon successful completion of PHIL 250, the student should be able to:

1. Describe and apply a variety of major ethical theories to "real life" situations involving ethical decision-making.
2. Use such methods as Problem-Based Learning for the study of ethical problems.
3. Demonstrate familiarity with the literature of ethical theory.
4. Describe multicultural perspectives that may affect ethical decisions in health care.
5. Describe the criteria for decision-making competency.
6. Distinguish between personal values, professional values and obligations, and legal obligations.
7. Distinguish between personal morality and professional ethics.

PHYSICAL THERAPIST ASSISTANT

PTA 101 Professional Issues I: Introduction to Physical Therapy (1)
1 hour lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100.
Recommended Preparation: PHIL 250.
Comment: Letter grade only. PTA 101 may not be audited. PTA 101 may not be taken credit/no credit. There is a 16 hour clinical observation requirement.

PTA 101 explores the roles and careers of physical therapists and physical therapist assistants in the context of health care systems. Students attend and write summaries of professional meetings, conduct a variety of interviews, and observe or volunteer in a physical therapy clinic. Students will explore the use of the internet for physical therapy information. PTA 101 also explores the US health care system and other international systems.

Upon successful completion of PTA 101, the student should be able to:

1. Explain the roles of physical therapists and physical therapist assistants.
2. Define the key terms in physical therapy using "The APTA Guide to Physical Therapy Practice".
3. Identify the key services provided by physical therapy in health care systems.
4. Complete 16 or more hours of observation/volunteer service in a physical therapy clinic.
5. Describe conduct that reflect the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe, a commitment to the profession of physical therapy and the consumers of health care services.
6. Explain the purpose of physical therapy and the scope of PTA practice to clients, community and others.
7. Describe the personal responsibility for career development, patient advocacy, life-long learning and membership in the professional association.
8. Read, locate and interpret health care literature, documents or Internet information.
9. Identify the history and development of physical therapy as a profession.
10. Discuss billing, reimbursement, and legislative issues in health care.
11. State aspects of planning and operating PT services.
12. Locate and write a summary of the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.
13. Identify individual and cultural differences and responds appropriately in all aspects of physical therapy services.
14. Compare and contrast the U.S. health care system with other international systems.

PTA 202 Thermal Agents (2)
4 hours lecture/lab per week
Prerequisite(s): Acceptance into the Physical Therapist Assistant program or consent of PTA program director.
Comment: Letter grade only. PTA 202 may not be audited. PTA 202 may not be taken credit/no credit.

PTA 202 presents the principles and application of, physiological effects of, indications, contraindications and of thermal, electromagnetic and acoustic modalities. Appropriate parameters for the treatment of pain, decreased range of motion, edema, and inflammation in the acute, sub-acute and chronic stages of healing will be included. A review of the mechanisms of trauma and healing along with the physiology of pain and its measurement will be covered. American Physical Therapy Association (APTA) approved terminology as it applies to diagnosis, pathologies, signs & symptoms as well as different equipment components and parameters will be required. This course will use lab simulation and role playing of actual clinical situations from the lecture information to problem solve, think analytically and modify parameters as it relates to observed responses and conditions presented.

Upon successful completion of PTA 202, the student should be able to:

1. Explain and perform safe, effective, and competent application of thermal and non-thermal modalities for a variety of conditions while adhering to the APTA Guide to Physical Therapy (PT) practice and legal standards presented in this course as it meets the current professional practice. Modalities may include Thermotherapy, Cryotherapy, Ultra sound, Infrared, Short-wave & Microwave diathermy, Whirlpool, Contrast baths, Ultra violet, and Lasers.
2. Describe the physical and emotional effects of chronic pain and the disease process for the patients.
3. Identify then justify the appropriateness of the treatment intervention choice to the presented signs/symptoms that are commonly associated with these diagnoses.
4. Identify and locate bony landmarks and the musculo skeletal structures that can be affected by the application of thermal and non-thermal interventions.
5. Demonstrate and explain patient positioning, draping and comfort as it addresses the treatment goals and the treatment plan.
6. Demonstrate the ability to problem solve, think analytically and modify parameters as they relate to observed patient responses and

conditions including recall of the indications, contraindications and precautions of the modalities presented.
7. Describe the expected and unexpected physiological effects of the applied modalities.
8. Demonstrate the ability to explain applied interventions to patient and families in an acceptable manner being sensitive to cultural issues and client biases.
9. Effectively teach the use of independent superficial thermotherapy and cryotherapy equipment for use in the patient's home situation.
10. Accurately record the thermal agent session using approved medical terminology and professional documentation format.

PTA 204 Traction (1.5)
4.5 hours lecture/lab per week for 10 weeks
Prerequisite(s): Acceptance into the PTA program or consent of the PTA program director.
Comment: Letter grade only. PTA 204 may not be audited. PTA 204 may not be taken credit/no credit.

PTA 204 presents the principles and applications of mechanical cervical and lumbar traction as they relate to clinical application: Included will be the anatomy of the structures affected, the physiological changes that occur, the indications and contraindications. By using lab simulation and role-playing of actual clinical situations students will problem solve, think analytically and modify treatment parameters as it relates to observed responses and conditions presented. Safety, frequency, duration and techniques for clinical and home applications will be covered.

Upon successful completion of PTA 204, the student should be able to:

1. Demonstrate competency as laid out in the Blue MACS and Cameron competency check lists in application of all types of mechanical traction. Applications must show safe, effective and efficient application and may include the use of various types of clinical cervical and lumbar traction applications including static and intermittent, symmetrical and asymmetrical traction as it applies to the symptoms, diagnosis and goals of treatment.
2. Demonstrate the ability to problem solve, think analytically and modify parameters as they relate to observed patient responses and conditions presented.
3. Identify the anatomical structures being affected by traction.
4. Identify indications and diagnosis appropriate for treatment with mechanical traction and the symptoms that commonly are associated with these diagnoses.
5. Identify contraindications for traction applications.
6. Position patient correctly for cervical and lumbar traction taking into consideration the patients symptoms, diagnosis, treatment goals and patient comfort.
7. Demonstrate safe, effective and efficient application and use of various types of home cervical and lumbar traction devices.
8. Effectively explain the uses of mechanical traction and the physiology changes that occur in both clinical and lay terms
9. Recognize and describe the range of normal and abnormal responses to traction and suggest appropriate adjustment to Rx parameters as needed.
10. Use approved terminology from the APTA: Guide to PT Practice and the APTA: Resource Guides.
11. Document accurately, position, parameters and results of lumbar and cervical traction.

PTA 205 Measurement for the Physical Therapist Assistant (1.5)
4.5 hours lecture/lab per week for 10 weeks
Prerequisite(s): Acceptance into the PTA program, or consent of the PTA program director, or a grade of "C" or higher or concurrent enrollment in HLTH 290 and a grade of "C" or higher or concurrent enrollment in HLTH 290L.
Comment: Students will need to purchase the APTA Student kit, which includes the measurement tools for PTA 205. Letter grade only. PTA 205 may not be audited. PTA 205 may not be taken credit/no credit.

PTA 205 provides the opportunity practical development on the theory and skills required for basic measurements within the scope of practice of the Physical Therapist Assistant. Performance skills in goniometry, gross manual muscle testing, ROM, circumferential and axial measurements are demonstrated through hands-on skill activities and group practice sessions.

Upon successful completion of PTA 205, the student should be able to:

1. Perform competent joint range of motion measurements and appropriate recording of the result.
2. Perform and pass vital signs certification.
3. Measure and document patient height and weight.
4. Competently measure and accurately document limb length and girth.
5. Document normal and abnormal muscle length and joint movements.
6. Perform manual muscle strength testing and document the results.
7. Identify the presence or absence of muscle mass and tone.
8. Identify contraindications and precautions to any PT intervention and changes needing the attention of the supervising PT.
9. Define and practice Universal/Standard precautions of the CDC during the measurement techniques.

10. Effectively explain the purpose of the measurement assessment and result to the physical therapist, clients, community and others.
11. Describe OSHA regulations.
12. Read, locate and interpret health care literature, documents or Internet information.
13. Achieve a passing score in the clinical internship course series.
14. Communicate data and information from PT interventions in written documentation with the patient, family, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
15. Identify individual and cultural differences and responds appropriately in all aspects of physical therapy services.
16. Demonstrate conduct that reflect the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and the community.
17. Describe the personal responsibility for career development, patient advocacy, life-long learning and membership in the professional association.

PTA 212 Physical Therapy Intervention for Neuropathologies (2)
5 hours lecture/lab per week for 12 weeks
Prerequisite(s): Acceptance into the PTA program or consent of the PTA program director.
Comment: Letter grade only. PTA 212 may not be audited. PTA 212 may not be taken credit/no credit. PTA 212 may require visits to a physical therapy clinic to observe physical therapy sessions. Students will be required to purchase scantron sheets for exams and quizzes.

PTA 212 presents the neurological anatomy, physiology, pathology, etiology, psychological, social and rehabilitative concepts for the application of therapeutic interventions for patients with various neuropathologies. The focus of this course is to develop theoretical knowledge and perform clinical scenarios of therapeutic interventions used for patients with neuropathologies such as traumatic brain injury (TBI), spinal cord injury (SCI), cerebral vascular accident (CVA), Guillain-Barre syndrome, Parkinson's, Alzheimer's, Polio, amyelotrophic syndrome (ALS), Multiple sclerosis, various dystrophies and other neuropathology acquired in adulthood.

Upon successful completion of PTA 212, the student should be able to:

1. Communicate data and information from physical therapy (PT) interventions in written, verbal, and non-verbal methods with the patient, family, significant other, PT, health care delivery personnel and others in an effective, appropriate and capable manner using accepted medical terminology.
2. Identify individual and cultural differences and responds appropriately in all aspects of physical therapy services.
3. Explain conduct that reflects the American Physical Therapy Association (APTA) Guide to Physical Therapist Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and meet the expectations of consumers receiving health care services
4. Implement the plan of care developed by the PT to achieve the short and long-term goals of treatment and intended outcomes.
5. Implement through demonstration the safe, effective and efficient competence in selected components of PT interventions identified in the plan of care:
    a. Motor learning concepts
    b. Movement analysis
    c. Functional training
    d. Therapeutic exercise
    e. Gait analysis and training
    f. Neuromuscular re-education
6. Perform competent skill of previous PT intervention applicable to neuropathologies:
    a. Assistive/adaptive devices
    b. Body mechanics and posture awareness
    c. Gait and locomotion training
    d. Prosthetics and orthotics
    e. Wheelchair management skills
    f. Architectural barriers
    g. Balance and coordination training
    h. Breathing exercises, coughing and postural drainage
    i. Conditioning and reconditioning exercises and techniques
    j. Positioning
    k. Range of motion exercises
    l. Stretching techniques and exercises
7. State the influences of positional changes, breathing patterns and thoracoabdominal movements in neuropathologies.
8. Identify and apply problem-solving knowledge to address and modify a PT program in response to patient safety and clinical indications such as symptoms aggravated by activities within the scope of PTA practice and report the findings to the supervising PT.
9. Identify the variety of neurological status measurement scales used to identify changes in arousal, mentation and cognition of patients.
10. Describe and demonstrate activities, positions and postures that aggravate or relieve pain and that influence integumentary health.
11. Identify the individual's or care giver's ability to care for the assistive, adaptive, prosthetic, orthotics and supportive devices in a safe

manner.

12. Identify and demonstrate normal and abnormal movement patterns and the presence or absence of selective motor control in patients with neuropathologies presented in the course.
13. Describe and identify architectural barriers in the home or community that may assist or hinder clients with neuropathologies.
14. Identify indications, contraindications and precautions to any PT intervention or the patient's present clinical status covered in the course.
15. Explain the purpose of physical therapy, the scope of PTA practice, the scope of practice between the various rehabilitation services and the multidisciplinary team approach in patient care and non-patient care activities.
16. Administer appropriate action and behavior in emergency situations.
17. Read, locate and interpret health care literature, documents or Internet information.
18. Describe the personal responsibility for career development, patient advocacy, life-long learning and membership in the professional association.
19. Define the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.

PTA 231 Professional Issues II: Documentation (2)

2 hours lecture per week
Prerequisite(s): Acceptance into the Physical Therapist Assistant program or consent of PTA program director; a grade of "C" or higher in PTA 101.
Comment: Letter grade only. PTA 231 may not be audited. PTA 231 may not be taken credit/no credit.

PTA 231 is designed to create a student's knowledge and skill of documentation and professional conduct. It investigates a variety of documentation forms and coding system used in patient records to comply with the billing, third-party payers and legal requirements. Students will apply technical writing appropriate to the current and future major coursework. In addition, the course examines professional conduct and physical therapy (PT) intervention as described in the American Physical Therapy Association (APTA) Guide to Physical Therapy Practice and international organizations.

Upon successful completion of PTA 231, the student should be able to:

1. Communicate data and information from PT interventions in written documentation with the patient, family, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
2. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
3. Demonstrate conduct that reflects the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and meet the expectations of consumers receiving health care services.
4. Record sample data of PT interventions essential to the plan of care using appropriate medical terminology, a variety of forms, documentation styles such as Subject, Objective, Assessment, Plan (SOAP) notes, billing and reimbursement in an accurate and timely manner.
5. Explain the purpose of physical therapy and the scope of physical therapist assistant (PTA) practice to simulated clients, community service learning opportunities and others.
6. Distinguish the scope of practice between the various rehabilitation services.
7. Read, locate and interpret health care literature, documents, Internet information, the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.
8. Identify the personal responsibility for career development, patient advocacy, life-long learning, membership in the professional association and aspects of planning and operating PT services.
9. Advocate PT legislative issues involving health care.
10. Accept and implement feedback from instructors, clinical instructors and others for documentation performance improvement.
11. State the importance of time management skills to function as an entry-level PTA practitioner.

PTA 232 Clinical Internship I (3)

120 hours clinical practice, 15 hours lecture and site visits
Prerequisite(s): Acceptance into the PTA program or consent of the PTA program director.
Comment: Letter grade only. PTA 232 may not be audited. PTA 232 may not be taken credit/no credit.

PTA 232 integrates clinical and didactic experiences by developing the students problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Knowledge and skills gained in prerequisite and corequisite courses are applied to therapeutic interventions that address the goals of treatment and the plan of care as set up by the supervising physical therapist. Clinical sites will include outpatient orthopedics and possibly long term care.

Upon successful completion of PTA 232, the student should be able to:

1. Provide safe and effective physical therapy services as specified in the plan of treatment laid out by the supervising physical therapist. Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills.
2. Recognize normal and abnormal reactions to treatment interventions. Report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include ROM, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and Activities of Daily Living (ADLS) to assist physical therapist in their evaluation process.
4. Describe the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Provide competent oral and written education to patients, family and other health care providers as it applies to physical therapy interventions.
6. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services
7. Exhibit professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.
8. Demonstrate an understanding of OSHA regulations and universal precautions
9. Demonstrate appropriate body mechanics in the application of treatment procedures to assure safety of both the patient and the student.
10. Identify the responsibilities of the student, clinic, and college in the internship.
11. Use the MACS as a guide for competency assessment, study, and performance standards.
12. Demonstrate appropriate SOAP and problem-oriented documentation procedures.
13. Practice confidentiality concerning patient and clinic information.
14. Participate in clerical and reception duties as needed.
15. Exhibit and identify practice and conduct that reflects the APTA code of ethics and practice standards.
16. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.

PTA 242 Advanced Therapeutic Interventions (3)
6 hours lecture/lab per week
Prerequisite(s): Acceptance into the Physical Therapist Assistant program or consent of the PTA program director.
Comment: Letter grade only. PTA 242 may not be audited. PTA 242 may not be taken credit/no credit.

PTA 242 presents the theory and application of therapeutic interventions as they relate to amputations, cardio pulmonary conditions, wounds, peripheral vascular disease, burns, lymphedema and Obstetrics and Gynecology (OB/GYN) conditions. It reviews basic physiology, pathology and etiology of the named conditions. An overview of the most commonly seen surgical and nonsurgical interventions will be included. By using lab simulation and role playing of actual clinical situations the students will use information to think analytically, problem solve and modify treatment interventions. Isolation techniques, prosthetic and orthotic fitting will be practiced. An integrated approach to treatment will include material from all previous courses with an emphasis on therapeutic exercise.

Upon successful completion of PTA 242, the student should be able to:

1. Identify the physiology, pathology and etiology of amputations, burns, PVD, wounds, lymphedema, cardiopulmonary conditions and OB/GYN conditions while being sensitive to ethnic and cultural issues and biases.
2. Identify the anatomical structures involved in the pathologies presented.
3. Describe appropriate surgical and non-surgical interventions as they apply to each presented diagnosis.
4. Describe and competently perform the treatment interventions and suggest modifications in response to the range of simulated patient outcomes as appropriate.
5. Describe the contraindications and precautions for each simulated diagnosis and intervention.
6. Identify and practice the requirements of universal precautions and Occupational Safety and Health Administration (OSHA) guidelines as they apply to physical therapy practice.
7. Use approved terminology in the documentation process of each simulated session of care.

PTA 243 Therapeutic Exercise for Orthopedic Conditions (3)

6 hours lecture/lab per week
Prerequisite(s): Admission into the Physical Therapist Assistant program or permission from the PTA program director.
Comment: Letter grade only. PTA 243 may not be audited. PTA 243 may not be taken credit/non credit.

PTA 243 presents the clinical testing, data collection and application of therapeutic exercise as it applies to selected orthopedic pathologies at different stages of injury and healing. The conditions will include sprains, strains, hypermobile and hypomobile joints, overuse syndromes, common spinal diagnosis, fractures, arthritis, total joint replacements and neuromusculoskeletal surgical interventions. The rational for orthopedic tests and the application of the treatment interventions for the selected conditions will include the safe and effective application of passive, assisted and active range of motion (ROM), isometric, concentric and eccentric exercise, progressive resisted exercise (PRE), pylometrics, neuromuscular facilitation/ inhibition, aerobic and anaerobic exercise, endurance training, balance exercises and isokinetic exercise. Use of lab simulation and role playing of actual clinical situations allow the student to demonstrate knowledge and skills to problem solve, think analytically, perform tests, select and/or modify exercise programs as they relate to the conditions presented and the observed physiologic responses. The use of appropriate communication skills, American Physical Therapy Association (APTA) terminology and documentation, and the ability to progress exercise programs within the plan of care will be emphasized.

Upon successful completion of PTA 243, the student should be able to:

1. Identify and discuss the physiology, pathology, etiology, signs and symptoms that occur in the selected orthopedic conditions.
2. Competently perform and explain the application of all appropriate physical therapy (PT) interventions and/or assessment skills for the selected orthopedic conditions within the guidelines of the ethical and legal practice standards.
3. Identify and explain the indications and contraindications for use of various types of therapeutic exercise during the three stages of healing of named orthopedic pathologies.
4. Analyze and implement proposed exercise programs for the efficacy in obtaining the goals of treatment.
5. Describe the use of aqua-therapy as it applies to the orthopedic population.
6. Correctly explain in both written and verbal communication styles the physiological effects of the applied exercise techniques in layman's terms and professional language.
7. Identify and discuss the effects of chronic abnormal pathology and pain on the musculo-skeletal system and the psychological well being of patients.
8. Demonstrate appropriate assessment tools and collect data for the named orthopedic pathologies.
9. Demonstrate ROM and stretching exercises, education of a home exercise program, PRE's, neuromuscular facilitation techniques, balance, endurance, and plyometrics to simulated orthopedic pathologies.
10. Demonstrate and justify trunk stabilization, posture, back exercises and ergonomics as they apply to common back conditions.
11. Demonstrate and justify functional activities to the rehabilitation of orthopedic conditions.
12. Use problem solving and analytical thinking skills, to modify exercise programs as they relate to observed simulated patient responses, conditions presented, and the goals of treatment.
13. Correctly identify and discuss major bony landmarks and musculo-skeletal structures, end feel, resting length, stretch, normal ROM, strength, power and endurance as they apply to the exercise programs presented.
14. Document accurately in Subjective, Objective, Assessment and Plan (SOAP) note form the simulated PT intervention session.

PTA 251 Professional Issues III: Employment (1)

1 hour lecture per week
Prerequisite(s): Acceptance into the Physical Therapist Assistant program, or consent of the PTA program director; a grade of "C" or higher in PTA 231.
Comment: Letter grade only. PTA 251 may not be audited. PTA 251 may not be taken credit/no credit.

PTA 251 is designed to develop a student's participation and commitment to the profession of physical therapy. It investigates the opportunities and responsibilities of an employee in the health care delivery system through activities of résumé preparation, mock job interviews, legislative testimonies, attending professional and government meetings and participating in the Hawai'i Chapter of the American Physical Therapy Association (HAPTA). This course emphasizes life long learning, the practice of ethics and legality, and the American Physical Therapy (APTA) core values. Finalization of an electronic portfolio will be emphasized for transfer to the APTA website.

Upon successful completion of PTA 251, the student should be able to:

1. Identify individual and cultural differences and respond ethically in all aspects of physical therapy services.
2. Discuss the relationships of government agencies to health care delivery, billing and reimbursement issues and aspects of planning and operating PT services.
3. Demonstrate conduct and responsibility that reflect the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and meet the expectations of consumers receiving health care services.
4. Advocate for the role of physical therapy and the scope of PTA practice.

5. Discuss the scope of practice between the various rehabilitation services.
6. Prepare a résumé and role-play an employment interview.
7. Identify Occupational Safety and Health Administration (OSHA) regulations.
8. Read, locate and interpret health care literature, documents, Internet information, the APTA code of conduct, APTA core values, APTA website of information for standardized practice and individual state practice acts for physical therapy.
9. Provide examples and role-play personal responsibility for career development, patient advocacy, life-long learning, membership in the professional association and the involvement in legislative issues.
10. Produce an electronic portfolio.

PTA 252 Clinical Internship II (3)
120 hours clinical practice, 15 hours lecture and site visits
Prerequisite(s): Acceptance into the PTA program, or consent of the PTA program director and a grade of "C" or higher in PTA 232.
Comment: Letter grade only. PTA 252 may not be audited. PTA 252 may not be taken credit/no credit.

PTA 252 integrates the clinical and didactic experiences by further developing the students problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Knowledge and skills gained in prerequisite and corequisite courses are applied to therapeutic interventions that address the goals of treatment and the plan of care as set up by the supervising physical therapist. Clinical sites may include outpatient orthopedics, acute care, home care, pediatrics, school health and long term care.

Upon successful completion of PTA 252, the student should be able to:

1. Provide safe and effective physical therapy services as specified in the plan of treatment laid out by the supervising physical therapist. Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills.
2. Recognize normal and abnormal reactions to treatment interventions. Report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include ROM, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and ADL's to assist physical therapist in their evaluation process.
4. Describe the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Provide competent oral and written education to patients, family and other health care providers as it applies to physical therapy interventions.
6. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services
7. Exhibit professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.
8. Demonstrate an understanding of OSHA regulations and universal precautions.
9. Demonstrate appropriate body mechanics in the application of treatment procedures to assure safety of both the patient and the student.
10. Identify the responsibilities of the student, clinic, and college in the internship.
11. Use the MACS as a guide for competency assessment, study, and performance standards.
12. Demonstrate appropriate SOAP and problem-oriented documentation procedures.
13. Practice confidentiality concerning patient and clinic information.
14. Participate in clerical and reception duties as needed.
15. Exhibits and identifies practice and conduct that reflects the APTA code of ethics and practice standards.
16. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.

PTA 262 Clinical Internship III (4)
200 hours clinical practice/ 3 hours lecture
Prerequisites: Admission to the PTA program, a grade of "C" or higher in PTA 252 or consent of PTA program director.
Comment: PTA 262 is offered in the last semester of the PTA program. Letter grade only. PTA 262 may not be taken credit/no credit. PTA 262 may not be audited. PTA 262 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately $50.00.

PTA 262 is the penultimate clinical experience designed to apply previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the assigned clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills of the assigned clinical setting to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are refined to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 262, the student should be able to:

1. Perform safe and effective physical therapy services as specified in the plan of treatment designed by the supervising physical therapist (PT). Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills. Students are expected to have an independent case load of 1 patient per hour.
2. Recognize normal and abnormal reactions to treatment interventions and report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include range of motion, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and Activities of Daily Living to assist PT in their evaluation process.
4. Communicate with the supervising Physical Therapist (PT) the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Provide competent oral and written education to patients, family, significant other, and other health care providers as it applies to physical therapy interventions.
6. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
7. Practice the professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.
8. Follow the Occupational Safety and Health Administration (OSHA) regulations and universal precautions.
9. Use appropriate body mechanics 100% of the time in the application of treatment procedures to assure safety of both the patient and the student.
10. Achieve analog scores of 85- 90% or higher competence on the current PTA clinical performance assessment forms and treatment skills expectations of the clinical setting, program and college.
11. Apply appropriate physical therapy documentation procedures.
12. Practice confidentiality concerning patient and clinic information applying Health Insurance Portability and Accountability Act (HIPAA) standards.
13. Participate in clerical and reception duties as needed.
14. Perform as a PTA in clinical practice and conduct that reflects the American Physical Therapy Association (APTA) code of ethics, PTA algorithm and practice standards.
15. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.

PTA 263 Clinical Internship IV (4 cr)
200 hours clinical practice/ 3 hours lecture
Prerequisite(s): Admission to the PTA program, a grade of "C" or higher in PTA 262 or consent of PTA program director.
Comment: PTA 263 is offered in the last semester of the PTA program. Letter grade only. PTA 263 may not be taken credit/no credit. PTA 263 may not be audited. PTA 263 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately $50.00.

PTA 263 is the capstone clinical experience designed to apply all previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are advanced to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 263, the student should be able to:

1. Independently execute safe and effective physical therapy services as specified in the plan of treatment designed by the supervising physical therapist. Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills. Students are expected to have a case load equivalent to the assigned facilities productivity standards.
2. Recognize normal and abnormal reactions to treatment interventions and report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include range of motion, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and Activities of Daily Living to assist physical therapist in their evaluation process.
4. Clearly confer with the supervising Physical Therapist (PT) the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Execute competent oral and written education to patients, family, significant other, and other health care providers as it applies to physical therapy interventions.
6. Recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services.
7. Practice the professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.

8. Abide by the Occupational Safety and Health (OSHA) regulations and universal precautions.
9. Use appropriate body mechanics 100% of the time in the application of treatment procedures to assure safety of both the patient and the student.
10. Achieve analog scores of 90% or higher competence on the current PTA clinical performance assessment forms and treatment skills expectations of the clinical setting, program and college.
11. Execute appropriate physical therapy documentation procedures.
12. Practice confidentiality concerning patient and clinic information applying Health Insurance Portability and Accountability Act (HIPAA) standards.
13. Perform clerical and reception duties as needed.
14. Function as a PTA in clinical practice and conduct that reflects the American Physical Therapy Association (APTA) code of ethics, PTA algorithm and practice standards.
15. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.
16. Apply for PTA occupation positions in any physical therapy clinical setting.
17. Successfully qualify for the National PTA licensing exam.

PTA 265 Electrotherapy (1)
1.5 hours lecture per week for 10 weeks
Prerequisite(s): Acceptance into the PTA program or consent of the PTA program director.
Corequisite(s): PTA 265L.
Comment: Letter grade only. PTA 265 may not be audited. PTA 265 may not be taken credit/no credit.

PTA 265 presents the production, physiological effects, indications, contraindications and applications of various therapeutic electrical interventions. Appropriate parameters for the treatment of pain, muscle weakness, edema, wounds, or introduction of medication or monitoring of muscle activity will be included. A review of mechanisms of trauma and healing along with the physiology of pain and its measurement will be covered Students are required to use APTA approved terminology as it applies to diagnosis, pathologies, signs & symptoms as well as different equipment components and parameters.

Upon successful completion of PTA 265, the student should be able to:

1. Identify the principles and production of named therapeutic electrical currents.
2. Describe the waveforms, frequencies and terminology applied to the major therapeutic electrical currents, such as Interferential, Premodulated, High Volt galvanic, Microcurrent, Alternating current, Direct current, Iontophoresis and Biofeedback.
3. Recall the indications, contraindications and precautions of the currents presented.
4. Describe the normal and abnormal physiological responses of the tissues to various electrical currents.
5. Describe the physical and emotional effects of chronic pain and disease process on the patients.
6. Identify possible emotional responses of the patients to various electrical currents.
7. Identify diagnosis appropriate for treatment with electrical currents and the signs/symptoms that are commonly associated with these diagnoses.
8. Describe the appropriate electrical treatment options for named diagnosis and symptoms such as pain, wounds, muscle atrophy, inflammation and joint stiffness.
9. Demonstrate an understanding of safety measures as they apply to electrical applications.
10. Demonstrate an understanding of OSHA regulations and Universal precautions as they apply to electrical modalities
11. Use approved terminology from the APTA: Guide to PT Practice and APTA: Electrotherapy Terminology in Physical Therapy

PTA 265L Electrotherapy Lab (1)
4.5 hours lab per week for 10 weeks
Prerequisite(s): Acceptance into the PTA program, or consent of the PTA program director.
Corequisite(s): PTA 265.
Comment: Letter grade only. PTA 265L may not be audited. PTA 265L may not be taken credit/no credit.

PTA 265L implements the clinical application of various electrotherapy modalities. By using lab simulation and role playing of actual clinical situations the students will use information from the PTA 265 lecture to problem solve, think analytically and modify parameters as it relates to observed responses and conditions presented. The application of treatment procedures as set out in the mock treatment plans will require the use of appropriate communication skills. Approved terminology from the APTA: Guide to Physical Therapy Practice and the APTA: Electrotherapeutic Terminology in Physical Therapy will be required for documentation of treatment parameters and patient reaction to applied electrical interventions.

Upon successful completion of PTA 265L, the student should be able to:

1. Demonstrate competency in the presented electrical modalities as laid out in the Mastery Assessment Clinical Skills Manual (MAC), Skill sheets and APTA: Guide to PT practice. The listed modalities may be indicated in the treatment of pain, edema, acute trauma, peripheral vascular disease, wound healing, reduction of muscle spasm and spasticity.
2. The presented electrical modalities may include: Transcutaneous electrical nerve stimulation, microcurrent electrical nerve stimulation, high volt galvanic, interferential, russian, neuromuscular electrical stimulation, Functional electrical nerve stimulation, iontophoresis, surface Electromyography (Biofeedback), ultrasound/Electrical stimulation combinations.
3. Demonstrate an understanding of the safety factors, indications, contraindications and precautions as they apply to the presented modalities.
4. Identify and locate bony landmarks and the musculoskeletal structures that can be affected by the application of electrical current.
5. Demonstrate patient positioning, draping and comfort as it addresses the treatment goals and the treatment plan.
6. Demonstrate the ability to problem solve, think analytically and modify parameters as they relate to observed patient responses and conditions presented.
7. Describe the physiological effects of the applied electrical modality.
8. Demonstrate an ability to explain electrical treatments to patient and families in an understandable and acceptable manner.
9. Demonstrate and effectively teach the use of independent electrotherapy equipment for use in the patient's home situation.
10. Document accurately in SOAP note form, the patient positioning, equipment.
11. Use approved terminology from the APTA: Guide to PT Practice.

PTA 275 Pediatrics for the Physical Therapist Assistant (1)

2 hours lecture/lab per week
Prerequisite(s): Acceptance into the Physical Therapist Assistant program or consent of the PTA program director.
Comment: Letter grade only. PTA 275 may not be audited. PTA 275 may not be taken credit/no credit. Transportation is required for clinic visits.

PTA 275 will provide students with the basic theories and therapeutic skills to deliver pediatric services with entry-level competence. Course content will include characteristics of disabilities in children including the role of the physical therapist assistant in a variety of settings. Case stories of children and families will illustrate course concepts and will also address the broader implications of the disability on the child, family, and community. Collaborative models of providing services will be explored including the provision of services in educational settings. Values that will be promoted throughout the course include a) family-centered care, b) cultural sensitivity, c) age-appropriate activities, d) functional skills, and e) collaborative teamwork.

Upon successful completion of PTA 275, the student should be able to:

1. Identify and practice ways to communicate effectively with families of children with disabilities.
2. Describe methods to provide physical therapy services that are culturally sensitive.
3. Describe the continuum of services available to children and the families in Hawai‘i.
4. Identify and role-play as team members in different service delivery systems and settings to children.
5. Describe the normal developmental process including age-appropriate play activities for young children.
6. Recognize and demonstrate normal and abnormal gross and fine motor development including normal postural movements, reflexes, and motor milestones.
7. Describe common genetic and neurological disabilities in children.
8. Identify abnormal movement and reflexes in children with neurological disorders.
9. Mimic and facilitate appropriate posture and movement for children with abnormal muscle tone and reflexes.
10. Link functional skills for children with a variety of disabilities.
11. Perform therapeutic interventions for common pediatric orthopedic, pediatric pulmonary disorders and spinal abnormalities.
12. Describe ways to support children with chronic and/or life-threatening illnesses.
13. Recall the potential risks of alcohol, drugs, and blood borne pathogen infections on development.
14. Describe and create assistive technology devices that can support children with disabilities to be included in home, school, and community activities.

PHYSICS

PHYS 100 Survey of Physics (3) KCC AA/DP
3 hours lecture per week
Prerequisite(s): MATH 25 or equivalent mathematics course.
Comment: Registration in PHYS 100L is optional.

PHYS 100 is an introduction to physics basic concepts. PHYS 100 is not open to those with previous college physics experience.

Upon successful completion of PHYS 100, the student should be able to:

1. Identify and define the associations and relationships of the topics treated in the course.
2. Utilize elementary abstract thinking and analytical reasoning.
3. Utilize calculation techniques with mathematically formulated principles.
4. Identify and assess quantitative information in terms of principles.
5. Identify and explain the concepts and principles related to the kinematics and dynamics of motion mechanical energy, power and efficiency.
6. Identify and explain the concepts and principles of thermodynamics and the kinetic theory of matter.
7. Identify and explain the concepts and principles of electricity, magnetism, waves and optics.
8. Identify mathematical proportionality in physical principles.

PHYS 100L Survey of Physics Laboratory (1) KCC AA/DY
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in PHYS 100.

PHYS 100L focuses on simple experiments in basic concepts of physics.

Upon successful completion of PHYS 100L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. Record, analyze, and extract information from data acquired.
3. Make quantitative determination and formulations.
4. Make conclusions and formulate insights into the subjects of the laboratory projects.
5. Write a laboratory report.

PHYS 122 Introduction to Science: Physical Science (3) KCC AA/DP
3 hours lecture per week
Prerequisite(s): MATH 25.
Recommended Preparation: High school physics and/or chemistry.

PHYS 122 focuses on characteristics of science, historical development of scientific concepts, and the understanding of the physical environment with emphasis in physics and chemistry.

Upon successful completion of PHYS 122, the student should be able to:

1. Identify and define associations and relationships of the topics treated.
2. Utilize elementary abstract thinking and analytical reasoning.
3. Utilize calculation techniques with mathematically formulated principles.
4. Identify and assess quantitative information in terms of principles.
5. Describe and identify the principles of motion, mechanical energy, power, and efficiency.
6. Identify and explain the concepts of thermal energy and the kinetic theory of matter.
7. Identify and explain chemical bonding and reactions.
8. Identify mathematical proportionality in physical principles.
9. Apply concepts learned to better utilize and control the physical environment.
10. Identify and explain the concepts of electricity, magnetism, and optics.

PHYS 122L Introduction to Science: Physical Science Laboratory (1) KCC AA/DY
3 hours lab per week
Prerequisite(s): MATH 25 or equivalent mathematics course; credit or concurrent enrollment in PHYS 122.
Recommended Preparation: High School physics and/or chemistry.

PHYS 122L focuses on simple experiments in physical science.

Upon successful completion of PHYS 122L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. Record, analyze, and extract information from data acquired.
3. Make quantitative determination and formulations.
4. Make conclusions and formulate insights into the subjects of the laboratory projects.
5. Write a laboratory report.

PHYS 151 College Physics I (3) KCC AA/DP and KCC AS/NS
3 hours lecture per week
Prerequisite(s): MATH 140.

PHYS 151 is the first course in a two semester sequence of an introductory algebra/trigonometry-based physics courses. The course focuses on the principles, theories and problem solving in motion, mechanical energy, waves, heat and thermodynamics.

Upon successful completion of PHYS 1151, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge of and skills of motion, energy, wave theory, and thermodynamics.
2. Identify and explain the concepts and principles related to the kinematics and dynamics of motion, energy, wave theory, and thermodynamics.
3. Identify and define the associations and relationships of the topics treated in the course.
4. Utilize abstract thinking and analytical reasoning in the analysis and solution of word problems.
5. Distinguish and define the mathematical proportionality in physical principles.
6. Utilize calculation techniques with mathematically formulated principles.
7. Identify and assess quantitative information in terms of physical principles.

PHYS 151L College Physics Laboratory I (1) KCC AA/DY and KCC AS/NS
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in PHYS 151.

PHYS 151L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in the kinematics and dynamics of motion, heat and thermodynamics. The course emphasis is on measurement techniques and analysis of data.

Upon successful completion of PHYS 151L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. State and identify the interaction between theory and experiments.
3. Design procedures for acquiring information from experimentation.
4. Record, analyze, and extract information from data acquired.
5. Make quantitative determination with formulations.
6. Write a technical report.

PHYS 152 College Physics II (3) KCC AA/DP
3 hours lecture per week
Prerequisite(s): PHYS 151.

PHYS 152 is the second course in a two-semester sequence of an introductory algebra/trigonometry based physics courses. PHYS 152 focuses on the principles, theories and problem solving in electricity, magnetism, light, relativity theory, quantum, atomic, and nuclear reactions.

Upon successful completion of PHYS 152, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge of and skills of electricity, magnetism, light, relativity theory, quantum, atomic and nuclear reactions.
2. Explain the concepts and principles related to electricity, magnetism, light, relativity theory, quantum, atomic and nuclear reactions.
3. Identify and define the associations and relationships of the topics treated in the course.
4. Utilize abstract thinking and analytical reasoning in the analysis and solutions of word problems.
5. Distinguish and define the mathematical proportionality in physical principles.
6. Utilize calculation techniques with mathematically formulated principles.
7. Identify and assess quantitative information in terms of physical principles.

PHYS 152L College Physics Laboratory II (1) KCC AA/DY
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in PHYS 152.

PHYS 152L is designed to provide the students hands-on experience in the experimental analysis, physical observation and measurements in electricity, magnetism and geometric optics. The course emphasis is on measurement techniques and analysis of data.

Upon successful completion of PHYS 152L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. State and identify the interactions between theory and experiments.
3. Design procedures for acquiring information from experimentation.
4. Record, analyze, and extract information from data acquired.
5. Make quantitative determinations with formulations.
6. Write a technical report.

PHYS 170 General Physics I (4) KCC AA/DP
4 hours lecture per week
Prerequisite(s): Credit or concurrent enrollment in MATH 206.
Recommended Preparation: PHYS 100.

PHYS 170 is the first semester of an introductory calculus-based course. The course will provide the students a comprehensive introduction to the principles and theories of the mechanics of particles, rigid bodies and fluids, wave motion, thermodynamics and kinetic theory.

Upon successful completion of PHYS 170, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge and skills of motion, mechanics, energy, wave theory, and thermodynamics.
2. Identify and explain the concepts and principles related to the kinematics and dynamics of motion, energy, wave theory and thermodynamics.
3. Identify and define the associations and relationships of the topics treated in the course.
4. Utilize abstract thinking and analytical reasoning in the analysis and solution of word problems.
5. Identify and use mathematical techniques used in the explanation of physical phenomena.
6. Utilize calculation techniques with mathematically formulated principles.
7. Identify and assess quantitative information in terms of physical principles.

PHYS 170L General Physics Laboratory I (1) KCC AA/DY
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in PHYS 170.

PHYS 170L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in mechanics, fluids, heat and thermodynamics. The course emphasis is on error analysis, measurement techniques, and report writing.

Upon successful completion of PHYS 170L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. State and identify the interaction between theory and experiments.
3. Design procedures for acquiring information from experimentation.
4. Record, analyze, and extract information from data acquired.

5. Make quantitative determinations with formulations.
6. Write a technical report.

PHYS 272 General Physics II (3) KCC AA/DP
3 hours lecture per week
Prerequisite(s): MATH 206; PHYS 170; PHYS 170L.

PHYS 272 is the second course in a two-semester sequence of an introductory calculus-based course. The course is a comprehensive introduction to the principles and theories of electricity, magnetism and geometric optics.

Upon successful completion of ART 155, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge and skills of electricity, magnetism and geometric optics.
2. Identify and explain the concepts and principles related to electricity, magnetism and geometric optics.
3. Identify and define the associations and relationships of the topics treated in the course.
4. Utilize abstract thinking and analytical reasoning in the analysis and solution of word problems.
5. Identify and use mathematical techniques in the explanation of physical phenomena.
6. Utilize calculation techniques with mathematically formulated principles.
7. Identify and assess quantitative information in terms of physical principles.

PHYS 272L General Physics Lab II (1) KCC AA/DY
3 hours lab per week
Prerequisite(s): PHYS 170, PHYS 170L; credit or concurrent enrollment in PHYS 272.

PHYS 272L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in electricity, magnetism and geometric optics. The course emphasis is on error analysis, measurement techniques, and report writing.

Upon successful completion of PHYS 272L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. State and identify the interaction between theory and experiments.
3. Record, analyze, and extract information from data acquired.
4. Make quantitative determinations with formulations.
5. Write a technical report.

PHYS 274 General Physics III (3) KCC AA/DP
3 hours lecture per week
Prerequisite(s): PHYS 272; PHYS 272L; credit or concurrent enrollment in MATH 231.

PHYS 274 focuses on the study of special relativity, quantum mechanics, solid-state physics, atomic and nuclear physics, and elementary particle physics.

Upon successful completion of PHYS 274, the student should be able to:

1. Demonstrate knowledge of the wave properties of light as demonstrated in interference and diffraction.
2. Demonstrate knowledge of the theory of special relativity and its effects: time dilation and space contraction.
3. Demonstrate knowledge of the particle like properties of EM radiation as demonstrated in the Photoelectric Effect and Compton Scattering.
4. Demonstrate knowledge of the theory of the wavelike properties of matter known as quantum theory.
5. Demonstrate knowledge of the nuclear structure, radioactive decay, nuclear interactions and its applications.
6. Demonstrate knowledge of the different elementary particles and their role in the forces that hold matter together.
7. Utilize abstract thinking and analytical reasoning in the analysis of word problems.
8. Utilize calculation techniques in the analysis of dynamics problems in physics and engineering.

PHYSIOLOGY

PHYL 160 The Science of Sleep (3) KCC AA/DB and KCC AS/NS
3 hours lecture per week
Recommended Preparation: BIOL 130, BIOL 171 or ZOOL 142.

PHYL 160 is an introduction to the science of sleep, sleep research and medical disorders associated with sleep. This course will include an overview of the anatomy and physiology of the central nervous system as it is related to sleep. The student will learn how to recognize healthy sleep and will be introduced to the methods sleep researchers use to diagnose both healthy and disordered sleep.

Upon successful completion of PHYL 160, the student should be able to:

1. Demonstrate knowledge of how sleep is regarded in different cultures and environments.
2. Demonstrate knowledge of the history of sleep research.
3. Demonstrate an understanding of how sleep changes from infancy to the elderly.
4. Demonstrate an understanding of polysomnography and other methods of analysis of sleep quality.
5. Demonstrate knowledge of the anatomy and physiology of sleep centers in the central nervous system.
6. Demonstrate knowledge of the neuroendocines and their effects on sleep.
7. Demonstrate an understanding of sleep stages, patterns and other features associated with sleep and sleep disorders.
8. Utilize and interpret physiological signals to evaluate sleep quality and sleep disorders.
9. Demonstrate an understanding of how researchers evaluate sleep quality and sleep disorders.
10. Demonstrate an understanding of current theory of why we sleep and possible causes of sleep disorders.

POLITICAL SCIENCE

POLS 110 Introduction to Political Science (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

POLS 110 is an introduction to the scope of political science, approaches to the discipline, its methods, tools, problems and processes.

Upon successful completion of POLS 110, the student should be able to:

1. Demonstrate an appreciation and interest in politics.
2. Acquire the necessary political skills to cope with political life.
3. Develop a political perspective which one may apply to contemporary social problems and institutions.
4. Show the beginnings of a world view and a sensitivity to political and socio-economic events in other parts of the world.
5. Show a personal growth which reflects a sharpened sense of one's own values in relation to political issues.

POLS 120 Introduction to World Politics (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

POLS 120 is designed to introduce students to the political, cultural, social, and economic forces shaping the new global order. As nations become more interdependent, it is important that citizens of all countries better understand one another. In the 21st century everyone will find themselves involved in some aspect of the global system. If students wish to compete in this new global system, they must be aware of international events which will shape the policies of the nation and will impact on their future.

Upon successful completion of POLS 120, the student should be able to:

1. Identify the relationships between nation-states and the development of the international political order.
2. Define the role of international organizations and laws.
3. Analyze the different modes of conflict resolution.
4. Apply knowledge of foreign strategic and economic policy to analyzing current events.
5. Evaluate politics of Europe, Middle East, Asia, Africa and the Americas.

POLS 130 Introduction to American Politics (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

POLS 130 focuses on American political processes and institutions as seen through alternate interpretations.

Upon successful completion of POLS 130, the student should be able to:

1. Weigh critically the political alternatives and develop a sense of political efficacy and identity.
2. Perceive the linkages between the political, economic, and social areas.
3. Analyze current American political problems and propose possible solutions.
4. Demonstrate a systems oriented approach to study political life in America.
5. Propose viable political alternatives and strategies for change.

POLS 171 Introduction to Political Futures (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

Using science, fact and fiction, POLS 171 shows how past and present images of the future influence people's actions.

Upon successful completion of POLS 171, the student should be able to:

1. Demonstrate an appreciation and awareness of futuristic studies.
2. Develop futuristic interdisciplinary perspectives which may be applied to contemporary socio-economic and political problems and institutions.
3. Demonstrate the ability to understand various cosmologies (a branch of philosophy dealing with the origins, processes, and structure of the universe) and epistemologies (a division of philosophy that investigates the nature and origins of knowledge) of the past and present as well as the future.
4. Exercise the ability to critically analyze the material's empirical and theoretical concepts. The student should be able to formulate and express values and opinions orally and in writing.
5. Formulate alternative perspectives of personal and career choices.

POLS 207 Politics of the Middle East (3) Spring KCC AA/DS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100.

POLS 207 explores the political systems of the countries in the Middle East with an emphasis on understanding the political, social, and cultural forces shaping contemporary politics in the region.

Upon successful completion of POLS 207, the student should be able to:

1. Describe the basic political structures of the countries in the Middle East.
2. Identify the various social and cultural factors, such as tribalism, religion, traditionalism and modernism, which impact on political decision-making.
3. Identify some of the major political issues in the region such as the Palestinian problem, Islamic fundamentalism , energy, impact of westernization and modernization on traditional societies, and regional conflicts.
4. Evaluate the role of the superpowers in the Middle East.
5. Explain the diversity within contemporary Middle East societies.
6. Express ideas and opinions clearly in writing.

POLS 270 Public Policy (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

POLS 270 is a study of how various issues and problems of society become the basis of public policies.

Upon successful completion of POLS 270, the student should be able to:

1. Demonstrate an appreciation and awareness of public policy analysis. Various public policy methodologies will be introduced to the student.
2. Develop an interdisciplinary perspective which may apply to contemporary socio-economic and political problems.
3. Demonstrate critical thinking by being able to evaluate different approaches to the study of public policy.
4. Critically analyze the material's empirical and theoretical concepts. The student should be able to formulate and express values and opinions orally and in writing.

PSYCHOLOGY

PSY 100 Survey of Psychology (3) KCC AA/DS and KCC AS/SS

3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24

PSY 100 focuses on basic concepts and principles of psychology in the areas of individual differences, motivation, emotion, perception, learning, methodology, test and measurement, history, abnormal, physiology and applied psychology. This course emphasizes lectures, multimedia presentations, discussions and experimentation

Upon successful completion of PSY 100, the student should be able to:

1. Describe the nature of psychology as a discipline, explaining why psychology is a science, and listing the primary objectives of psychology: describing, understanding, predicting, and controlling behavior and mental processes.
2. Identify the concepts, language, and major theories of the discipline to account for psychological phenomena.
3. Compare and contrast the major perspectives of psychology: behavioral, neuroscience, cognitive, evolutionary, humanistic, psychodynamic, and sociocultural.
4. Identify overarching themes and persistent questions in psychology.
5. Describe the basic methodology of the science of psychology, explaining different research methods used by psychologists.
6. Use critical thinking and reasoning effectively, identifying and evaluating the source, context, and credibility of information, evaluating popular media reports regarding psychological research.
7. State how psychological principles can be used to explain social issues and inform public policy and recognize that sociocultural contexts may influence the application of psychological principles in solving social problems.
8. Apply psychological concepts, theories, and research findings as these relate to everyday life.
9. Explain the necessity for ethical behavior in all aspects of the science and practice of psychology.
10. Communicate effectively, by listening accurately and actively and articulating ideas thoughtfully and purposefully.
11. Demonstrate the ability to collaborate effectively.

PSY 170 Psychology of Adjustment (3) KCC AA/DS and KCC AS/SS

3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 and MATH 24.
Comment: PSY 170 may not be substituted for the PSY 100 prerequisite for 200-level PSY courses.

PSY 170 provides students with an opportunity to explore their own thoughts, feelings, and behavior as these apply to the students' daily lives. Students examine their belief systems, ascertain the credibility of such systems, and then reaffirm, modify, or discontinue their patterns of coping. This course allows students to discover tools for personal growth and gives them knowledge of the psychological resources that are available in the community. In this capacity, this course allows students to better understand who they are so that they may be better able to understand the attitudes and behaviors exhibited by others. It opens students up to new ideas and new ways of doing things in a non-threatening manner. PSY 170 is instructional in nature and is not intended to be a course in group therapy.

Upon successful completion of PSY 170, the student should be able to:

1. Compare and contrast different models of human behavior.
2. Develop a concept of self through self-examination, values clarification, and so on.
3. Identify normal and abnormal coping mechanisms.
4. Describe how effective and ineffective coping behaviors are manifested.
5. List a variety of available psychological resources in the community and the basic method(s) they employ.
6. Define and distinguish between the different roles one must take to live a responsible life within the family, community, and the general society.
7. Express ideas and opinions clearly in writing.

PSY 202 Psychology of Gender (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24; PSY 100 with a grade of "C" or higher.
Comment: PSY 202 is cross-listed as WS 202.

PSY 202 is a survey of contemporary theoretical and research issues relevant to the psychological development and functioning of women. Topics covered in PSY 202 include the following: gender differences in biology, personality, behavior and development. Multicultural perspectives are emphasized.

Upon successful completion of PSY 202, the student should be able to:

1. Describe the nature of psychology of gender as a discipline.
2. Compare and contrast the major perspectives of psychology as they relate to the psychology of gender.
3. Identify overarching themes and persistent questions regarding diversity in the development of gender.
4. Discuss contemporary psychological research on gender differences in biology, personality, behavior, and development.
5. Analyze the validity of material related to the psychology of gender, by identifying and evaluating the source, context, and credibility of information, evaluating popular media reports of psychological research related to gender, and by distinguishing amongst assumptions, emotional appeals, speculations, and scientific evidence.
6. State how psychological principles can be used to explain social issues related to gender and inform public policy.

PSY 212 Survey of Research Methods (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24; PSY 100 with a grade of "C" or higher.

PSY 212 provides an overview of research design strategies used in psychological research. It covers the basic descriptive statistics and concepts within inferential statistics that are necessary for appreciation and comprehension of research findings. The course presents the student with the fundamentals of research that all psychology majors should know. Emphasis is placed on the critical evaluation of psychological research.

Upon successful completion of PSY 212, the student should be able to:

1. Explain the use of descriptive statistics.
2. Generate descriptive statistics from a given data set.
3. Explain the uses of inferential statistics.
4. Use a statistical computer software program to perform simple analyses such as t tests and chi square tests.
5. Differentiate between basic research designs and the different types of evidence that are obtained from different methods.
6. Critically analyze psychological literature.
7. Express ideas and opinions clearly, both orally and in writing.

PSY 230 Introduction to Psychobiology (3) KCC AA/DB
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24; PSY 100 with a grade of "C" or higher.

PSY 230 investigates the relationship between biology, human behavior, and mental processes. This course emphasizes the structure and function of the central nervous system and the ethological analyses of behavior and mental processes.

Upon successful completion of PSY 230, the student should be able to:

1. Describe the nature of psychobiology as a discipline.
2. Define the basic structures and functions of the central nervous system and describe how these structures and functions relate to observable behavior.
3. Discuss the relationship between complex behaviors and mental processes and biological systems.
4. Describe the interaction of heredity and environment as it applies to predicting and understanding human behavior.
5. Describe the basic methodology and research methods used to explore the physiological bases of behavior, and discuss how various research designs address different types of questions and hypotheses.
6. Identify themes and persistent questions pertaining to the biology of behavior.
7. State the necessity for ethical behavior in all aspects of the science and the practice of psychobiology.
8. Communicate effectively, by listening accurately and actively, and by articulating ideas thoughtfully and purposefully.

PSY 240 Developmental Psychology (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): PSY 100; qualification for ENG 100; qualification for MATH 24.

PSY 240 emphasizes the psychological processes underlying development of the person from conception through adulthood.

Upon successful completion of PSY 240, the student should be able to:

1. Explain the developmental process from conception through adulthood.
2. Describe and evaluate the various stages of development.
3. Describe and explain the methodology of developmental psychology.
4. Critically review the research literature in developmental psychology.

PSY 260 Psychology of Personality (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): PSY 100; qualification for ENG 100; qualification for MATH 24.

PSY 260 is a survey of major theoretical approaches to the scientific study of personality. Topics include development, assessment, change, and cultural-social determinants. Current research issues are emphasized.

Upon successful completion of PSY 260, the student should be able to:

1. Compare and contrast the basic theoretical approaches to personality, including their corresponding views of development, change, and assessment.
2. Distinguish between the various methodological approaches to personality research.
3. Assess the strength of research findings within a given research perspective.
4. Express ideas and opinions clearly, both orally and in writing.

PSY 270 Introduction to Clinical Psychology (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): PSY 100; qualification for ENG 100; qualification for MATH 24.

PSY 270 surveys types of psychological problems, methods of assessment and types of treatment, along with the history and theories of behavior problems.

Upon successful completion of PSY 270, the student should be able to:

1. Describe the development and maintenance of pathological behavior.
2. Identify and explain the types of clinical assessment.
3. Critically review research literature concerning clinical psychology.

RADIOLOGIC TECHNOLOGY

RAD 100 Introduction to Radiologic Technology (3) Fall
3 hours lecture per week
Prerequisite(s): Acceptance into the Radiologic Technology program.
Corequisite(s): RAD 100L; RAD 105; RAD 140.
Comment: RAD 100 is offered in the fall semester only. Letter grade only. RAD 100 may not be taken credit/no credit. RAD 100 may not be audited.

RAD 100 provides an introduction to radiologic technology procedures: ethics, safety, dark room chemistry and technique, elementary radiographic positioning, radiographic exposure principles.

Upon successful completion of RAD 100, the student should be able to:

1. Discuss basic ethical principles in the performance of one's duties as a radiologic technologist.
2. Explain the principles of processing techniques and radiographic exposure and correlate with skills necessary for thorough and efficient functioning in a darkroom.
3. Describe the principles of radiologic techniques and correlate theoretical knowledge with practical application.
4. Explain the principles of basic radiographic positioning of structures, and correlate this knowledge with practical application.

5. Describe the organizational structure of the hospital and its function in society.
6. Describe the role of the radiologic technologist in infection control, patient safety, and effective communication.
7. State a brief description of job tasks, educational systems, requirements for licensure, employment and career opportunities, and any special aptitudes necessary for working in radiologic technology as a health career.
8. State the importance of having specific knowledge about professionalism, death, patient rights, ethics, health insurance, and other medical-legal considerations.

RAD 100L Introduction to Radiologic Technology Laboratory (2) Fall

6 hours lab per week
Prerequisite(s): Acceptance into the Radiologic Technology program.
Corequisite(s): RAD 100; RAD 105; RAD 140.
Comment: RAD 100L is offered in the fall semester only. Letter grade only. RAD 100L may not be taken credit/no credit. RAD 100L may not be audited.

RAD 100L provides an introduction to radiologic technology procedures: processing, positioning, and equipment.

Upon successful completion of RAD 100L, the student should be able to:

1. Apply techniques taught in RAD 100, including processing, radiographic exposure, and positioning.
2. Apply the basic concepts of personal and professional adjustment in interpersonal relationships with members of peer groups and instructional staff.
3. Apply the principles of medical ethics to analyze, synthesize, and/or evaluate simulated clinical situations involving medical ethics.
4. Name and discuss the chemical constituents of processing solutions and their functions.
5. Discuss the function(s) of and safely apply various darkroom and processor apparatus.
6. Explain to the satisfaction of the instructor the theory of X-ray technique.
7. Apply knowledge of radiographic anatomy by correctly positioning the chest, abdomen, upper and lower extremities, shoulder girdle, hip joint, and pelvic girdle to obtain diagnostic radiographs.

RAD 105 Radiologic Pharmacology (2)

2 hours lecture per week
Prerequisite(s): Acceptance into Radiologic Technology program; a grade of "C" or higher in BIOL 130; a grade of "C" or higher in BIOL 130L.
Comment: Letter grade only. RAD 105 may not be taken credit/no credit. RAD 105 may not be audited.

RAD 105 provides basic concepts of general pharmacology and the use, effects and side-effects of select drugs or medications presented in the course

Upon successful completion of RAD 105, the student should be able to:

1. Distinguish between the chemical, generic and trade names of select drugs.
2. Describe pharmacokinetic and pharmacodynamic principles of drugs.
3. Classify drugs as presented in the course.
4. Explain the use, effects and side-effects of select drugs.
5. Define the categories of contrast media and give specific examples of each category.
6. Describe the methods and techniques of select drug administration.
7. Describe the routes of administration.
8. Describe complications and the appropriate treatment measures for these complications associated with select drugs.
9. Prepare an injection using sterile technique.
10. Explain a radiographer's professional liability concerning drug administration.

RAD 110 Radiologic Technique (3) Spring

3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 100; a grade of "C" or higher in RAD 100L; a grade of "C" or higher in RAD 105; a grade of "C" or higher in RAD 140.
Corequisite(s): RAD 110L; RAD 120; RAD 141; RAD 149.
Comment: RAD 110 is offered in the spring semester only. Letter grade only. RAD 110 may not be taken credit/no credit. RAD 110 may not be audited.

RAD 110 covers principles of x-ray technique and patient care during radiographic procedures.

Upon successful completion of RAD 110, the student should be able to:

1. Explain the principles of radiographic technique and correlate this knowledge with practical application.
2. Discuss patient care procedures and techniques used in the general care of the patient with emphasis on the role of the radiologic technologists.
3. Explain the theory of x-ray machine technique and exposure factors.
4. Knowledgeably and correctly discuss basic radiographic anatomy and positioning of the cranium, spine, bony thorax, and soft tissues of the chest.
5. Describe the role of the Radiologic Technologist in patient assessment, administering medications, and caring for emergency room and special needs patients.

RAD 110L Radiologic Technique Laboratory (2) Spring
6 hours lab per week
Prerequisite(s): A grade of "C" or higher in RAD 100; a grade of "C" or higher in RAD 100L; a grade of "C" or higher in RAD 105; a grade of "C" or higher in RAD 140.
Corequisite(s): RAD 110; RAD 120; RAD 141; RAD 149.
Comment: RAD 110L is offered in the spring semester only. Letter grade only. RAD 110L may not be taken credit/no credit. RAD 110L may not be audited.

RAD 110L covers the application of technique charts to radiography of specified body structures.

Upon successful completion of RAD 110L, the student should be able to:

1. Apply techniques taught in RAD 110, including producing radiographs of the skull, facial bones, spine, bony thorax, and soft tissues of the chest.
2. Explain the theory of x-ray technique and apply this to correct determination of exposure factors.
3. Correctly apply knowledge of basic patient care procedures and techniques.
4. Apply knowledge of basic radiographic anatomy by correctly positioning the skull facial bones, spine, bony thorax and soft tissue of the chest to obtain diagnostic radiographs.

RAD 120 Radiologic Physics (3) Spring
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 100; a grade of "C" or higher in 100L; a grade of "C" or higher in 140.
Corequisite(s): RAD 110; RAD 110L; RAD 141; RAD 149.
Comment: RAD 120 is offered in the spring semester only. Letter grade only. RAD 120 may not be taken credit/no credit. RAD 120 may not be audited.

RAD 120 provides a foundation in basic principles of ionizing radiation applied to equipment used in radiologic technology.

Upon successful completion of RAD 120, the student should be able to:

1. Explain the fundamentals of electrical and radiation physics and the basic principles underlying the operation of x-ray equipment and auxiliary devices.
2. Identify and explain importance of applying basic principles of radiation biology and protection.
3. Explain the function of each part in x-ray machine circuit.
4. Explain the method of production of x-rays and the interactions of x-rays and matter.

NOTICE: RAD 140, 141, 142, 240, 241 and 242 are special courses in Hospital Radiographic Technique.
Courses in Hospital Radiographic Technique provide approximately 2200 hours of clinical experience in the radiology department of a cooperating hospital. These experiences include observation of and practice in positioning the sick and injured patient, obtaining the exact radiograph requested by the physician, and assisting in treatment of disease. In these special courses in Hospital Radiographic Technique film exposure time, film manipulation and the finished radiograph are critically studied. Throughout the two academic years and interim summer, certain approved radiographs must be completed. These, by location, include radiographs of extremities, gastrointestinal tract, urinary tract, skull (sinuses, facial bones, mastoids, mandible), spine, pelvis (hip-nailing), shoulder and thoracic cage and cavity (lungs, heart and sternum).

RAD 140 Hospital Radiographic Technique I (6) Fall
360 total clinical hours
Prerequisite(s): Acceptance into the Radiologic Technology program.
Corequisite(s): RAD 100; RAD 100L; RAD 105.
Comment: 280 clinical hours during 16 week semester, 80 clinical hours during 4 week semester break. RAD 140 is offered in the fall semester only. Letter grade only. RAD 140 may not be audited. RAD 140 may not be taken credit/no credit.

RAD 140 provides for observation and supervised practice in positioning the patient and obtaining approved radiographs as requested with emphasis on chest, abdomen, and upper extremities.

Upon successful completion of RAD 140, the student should be able to:

1. Perform safe, correct radiographic technique and positioning, with emphasis on the chest, abdomen, upper extremities.
2. Correctly adapt technical factors to meet the clinical situation.
3. Correlate anatomy and physiology and radiographic procedures and techniques.
4. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
5. Correlate anatomy and physiology and assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Demonstrate professionalism in attendance, attitude, and behavior.
7. Perform required clinical competencies.

RAD 141 Hospital Radiographic Technique II (5) Spring
317 total clinical hours
Prerequisite(s): A grade of "C" or higher in RAD 100; a grade of "C" or higher in RAD 100L; a grade of "C" or higher in RAD 105; a grade of "C" or higher in RAD 140.
Corequisite(s): RAD 110; RAD 110L; RAD 120; RAD 149.
Comment: RAD 141 is offered in the spring semester only. Letter grade only. RAD 141 may not be taken credit/no credit. RAD 141 may not be audited.

RAD 141 provides for observation and supervised practice in positioning the patient and obtaining approved radiographs as requested with emphasis on specified structures.

Upon successful completion of RAD 141, the student should be able to:

1. Perform safe, correct radiographic technique and positioning, with emphasis on the skull, facial bones, spine and bony thorax.
2. Correctly adapt technical factors to meet the clinical situation.
3. Correlate anatomy and physiology and radiographic procedures and techniques.
4. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
5. Correlate anatomy and physiology and assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Perform required clinical competencies.

RAD 142 Hospital Radiographic Technique III (7) Summer
416 total clinical hours
Prerequisite(s): A grade of "C" or higher in RAD 110; a grade of "C" or higher in RAD 110L; a grade of "C" or higher in RAD 120; a grade of "C" or higher in RAD 141; a grade of "C" or higher in RAD 149.
Corequisite(s): RAD 150.
Comment: RAD 142 is offered in the summer only. Letter grade only. RAD 142 may not be taken credit/no credit. RAD 142 may not be audited.

RAD 142 provides for observation and supervised practice in positioning the patient and obtaining approved radiographs as requested with emphasis on specified structures.

Upon successful completion of RAD 142, the student should be able to:

1. Perform safe, correct radiographic technique and positioning, with emphasis on the cranium and bedside radiography of the chest, abdomen and skeletal system.
2. Adapt technical factors to meet the clinical situation.
3. Correlate anatomy and physiology and radiographic procedures and techniques.
4. Apply pediatric radiography in clinical setting.
5. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Correlate anatomy and physiology with assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
7. Perform required clinical competencies.

RAD 149 Radiographic Film Critique I (1) Spring
1 hour lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 100; a grade of "C" or higher in RAD 100L; a grade of "C" or higher in RAD 105; a grade of "C" or higher in RAD 140.
Corequisite(s): RAD 110; RAD 110L; RAD 120; RAD 141.
Comment: RAD 149 is offered in the spring semester only. Letter grade only. RAD 149 may not be taken credit/no credit. RAD 149 may not be audited.

RAD 149 focuses on evaluation of radiographic technique through critique of films obtained in RAD 141; presentation of case reports.

Upon successful completion of RAD 149, the student should be able to:

1. Recognize and describe the prime factors of radiography and the factors that affect the radiographic quality of a film.
2. Discuss specific changes that could be made to the prime factors of radiography and the factors that affect radiographic film quality to improve the quality of specific films.
3. Correlate knowledge gained in lecture classes with factors that affect radiographic quality of a film.
4. Correlate knowledge of anatomy and physiology, including cross-sectional anatomy, with radiographic procedures performed in RAD 140 and 141.
5. Apply the knowledge gained in RAD 110, 110L and 141 to identify the types of assigned radiographs.
6. Apply knowledge gained in RAD 110, 110L, and 141 to identify normal anatomical structures on assigned radiographs.
7. Apply knowledge gained in RAD 110, 110L, and 141 to any and all aspects of radiography viewed in properly exposed and processed films.
8. Identify the elements of thorough radiographic image evaluation.
9. Judge whether an image is optimal, diagnostic, or needs to be repeated.

RAD 150 Radiographic Film Critique II (1) Summer
2 hours lecture per week
Prerequisite(s): A grade of "C or higher in RAD 110; a grade of "C" or higher in RAD 110L; a grade of "C" or higher in RAD 120; a grade of "C" or higher in RAD 141.
Corequisite(s): RAD 142.
Comment: RAD 150 is offered in the summer only. Letter grade only. RAD 150 may not be taken credit/no credit. RAD 150 may not be audited.

RAD 150 focuses on evaluation of radiographic technique through critique of films obtained in RAD 142; presentation of case reports.

Upon successful completion of RAD 150, the student should be able to:

1. Recognize and describe the prime factors of radiography and the factors that affect the radiographic quality of a film.
2. Discuss specific changes that could be made to the prime factors of radiography and the factors that affect radiographic film quality to improve the quality of specific films.
3. Correlate knowledge gained in lecture classes with factors that affect radiographic quality of a film.
4. Correlate knowledge of anatomy and physiology, including cross-sectional anatomy, with radiographic procedures performed in RAD 141 and 142.
5. Apply the knowledge gained in beginning courses to identify assigned radiographs.
6. Apply knowledge gained in beginning courses to identify normal anatomical structures on assigned radiographs.
7. Apply knowledge gained in beginning courses to identify all types of film artifacts.
8. Apply knowledge gained in beginning courses to identify properly done radiographs.
9. Use a film evaluation procedure to explain how to improve the diagnostic quality of a radiograph.
10. Discuss radiographic quality based on factors governing recognition and differentiation.

RAD 200 Advanced Radiologic Positioning (3) Fall
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 142; a grade of "C" or higher in RAD 150.
Corequisite(s): RAD 200L; RAD 210; RAD 240; RAD 248.
Comment: RAD 200 is offered in the fall semester only. Letter grade only. RAD 200 may not be audited. RAD 200 may not be taken credit/no credit.

RAD 200 focuses on advanced radiographic positioning of the osseous system.

Upon successful completion of RAD 200, the student should be able to:

1. Explain principles of advanced x-ray positioning of osseous structures.
2. Correlate knowledge of principles with practical application.

RAD 200L Advanced Radiologic Positioning Laboratory (2) Fall
6 hours lab per week
Prerequisite(s): a grade of "C" or higher in RAD 142; a grade of "C" or higher in RAD 150.
Corequisite(s): RAD 200; RAD 210; RAD 240; RAD 248.
Comment: RAD 200L is offered in the fall semester only. Letter grade only. RAD 200L may not be audited. RAD 200L may not be taken credit/no credit.

RAD 200L develops skills in the construction and application of technique charts for the osseous system, and the application and use of contrast media in radiologic technology procedures.

Upon successful completion of RAD 200L, the student should be able to:

1. Apply techniques taught in RAD 200.
2. Construct technique charts in advanced anatomy and positioning of the osseous system.
3. Correctly carry out procedures involving the use of contrast media in radiography.
4. Apply advanced techniques of positioning structures and organs to obtain diagnostic radiographs.

RAD 210 Advanced Radiologic Technique (3) Fall
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 142; a grade of "C" or higher in RAD 150.
Corequisite(s): RAD 200; RAD 200L; RAD 240; RAD 248.
Comment RAD 210 is offered in the fall semester only. Letter grade only. RAD 210 may not be taken credit/no credit. RAD 210 may not be audited.

RAD 210 focuses on advanced principles of radiographic exposure, contrast media procedures, pediatric radiography, diseases/injuries and relationship to radiology; introduction to computer applications in radiography.

Upon successful completion of RAD 210, the student should be able to:

1. Explain the manipulation of exposure factors.
2. Explain procedure in radiography involving the use of contrast media.

3. Explain the methods of pediatric radiography.
4. Explain certain changes that occur in disease and injury and their application to radiologic technology.
5. Explain advanced principles of imagery and technique, including computer applications.

RAD 230 Special Radiographic Procedures (3) Spring
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 200; a grade of "C" or higher in RAD 200L; a grade of "C" or higher in RAD 210; a grade of "C" or higher in RAD 240; a grade of "C" or higher in RAD 248.
Corequisite(s): RAD 230L; RAD 241; RAD 249; RAD 255.
Comment: RAD 230 is offered in the spring semester only. Letter grade only. RAD 230 may not be audited. RAD 230 may not be taken credit/no credit.

RAD 230 is a survey of special procedures in radiography and equipment involved.

Upon successful completion of RAD 230, the student should be able to:

1. Describe each special radiographic procedure in terms of patient preparation, contrast medium employed, general procedural methods, method of administering contrast media, special equipment utilized, projections required, and anatomy visualized.
2. Describe the special needles, guide wires and catheters required for each special procedure.
3. Label the component parts and explain how each type of changer works in the clinical situation.
4. Describe the procedural steps involved in the Seldinger technique and lumbar puncture.
5. Identify cross-sectional anatomy on computed tomography and magnetic resonance imaging scans.
6. Explain the imaging principles of ultrasonography, computed tomography, magnetic resonance imaging, and nuclear medicine.

RAD 230L Special Radiographic Procedures Laboratory (2) Spring
6 hours lab per week
Prerequisite(s): A grade of "C" or higher in RAD 200; a grade of "C" or higher in RAD 200L; a grade of "C" or higher in RAD 210; a grade of "C" or higher in RAD 240; a grade of "C" or higher in RAD 248.
Corequisite(s): RAD 230; RAD 241; RAD 249; RAD 255.
Comment: RAD 230L is offered in the spring semester only. Letter grade only. RAD 230L may not be audited. RAD 230L may not be taken credit/no credit.

RAD 230L provides laboratory practice in special procedures in radiography and use of equipment involved.

Upon successful completion of RAD 230L, the student should be able:

1. Describe each special radiographic procedure discussed in RAD 230 in terms of patient preparation, contrast medium employed, general procedural methods, method of administering contrast media, special equipment utilized, projections required, and anatomy visualized.
2. Identify and describe the special needles, guide wires and catheters required for each special procedure discussed in RAD 230.
3. Observe and explain how each type of changer works in the clinical situation.
4. Observe and describe the procedural steps involved in the Seldinger technique and lumbar puncture.
5. Identify cross-sectional anatomy on computed tomography and magnetic resonance imaging scans observed during laboratory sessions.
6. Explain the imaging principles of ultrasonography, computed tomography, magnetic resonance imaging, and nuclear medicine.
7. Correctly apply specified quality control measures and tests to radiographic and imaging equipment.

RAD 240 Hospital Radiographic Technique IV (7) Fall
413 total clinical hours
Prerequisite(s): A grade of "C" or higher in RAD 142; a grade of "C" or higher in RAD 150.
Corequisite(s): RAD 200; RAD 200L; RAD 210; RAD 248.
Comment: RAD 240 is offered in the fall semester only. Letter grade only. RAD 240 may not be audited. RAD 240 may not be taken credit/no credit.

RAD 240 provides for observation and supervised practice in pediatric radiography and radiography using contrast media.

Upon successful completion of RAD 240, the student should be able to:

1. Apply safe, correct radiographic technique and positioning, with emphasis on radiographic examinations using contrast media of the gastrointestinal and urinary system.
2. Correctly adapt technical factors to meet the clinical situation.
3. Correlate anatomy and physiology and radiographic procedures and techniques.
4. Apply basic principles of pediatric radiography.
5. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Correlate anatomy and physiology and assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
7. Demonstrate professionalism in attendance, attitude, and behavior.
8. Meet clinical objectives.

RAD 241 Hospital Radiographic Technique V (6) Spring
351 total clinical hours
Prerequisite(s): A grade of "C" of higher in RAD 200; a grade of "C" of higher in RAD 200L; a grade of "C" of higher in RAD 210; a grade of "C" of higher in RAD 240; a grade of "C" of higher in RAD 248.
Corequisite(s): RAD 230; RAD 230L; RAD 249; RAD 255.
Comment: RAD 241 is offered in the spring semester only. Letter grade only. RAD 241 may not be audited. RAD 241 may not be taken credit/no credit.

RAD 241 provides for observation and supervised practice in special procedures in radiography.

Upon successful completion of RAD 241, the student should be able to:

1. Apply safe and correct radiographic technique and positioning, with emphasis on special radiographic examinations using and imaging techniques studied in RAD 230 and 230L.
2. Correctly adapt technical factors to meet the clinical situation.
3. Correlate of anatomy and physiology and radiographic procedures and techniques.
4. Apply principles of pediatric radiography.
5. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Correlate anatomy and physiology and assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
7. Meet clinical objectives.

RAD 242 Hospital Radiographic Technique VI (5) Summer
302 total clinical hours
Prerequisite(s): A grade of "C" or higher in RAD 230; a grade of "C" or higher in RAD 230L; a grade of "C" or higher in RAD 241; a grade of "C" or higher in RAD 249; a grade of "C" or higher in RAD 255.
Corequisite(s): RAD 260.
Comment: RAD 242 is offered in the summer only. Letter grade only. RAD 242 may not be audited. RAD 242 may not be taken credit/no credit.

RAD 242 provides for hospital clinical experiences with emphasis on experiences in operating room examinations with an advanced level of safe, correct radiographic technique and positioning, adaptation of technical factors to meet the clinical situation, and correlation of anatomy and physiology to radiographic procedures and techniques. It includes rotation in either nuclear medicine or radiation therapy.

Upon successful completion of RAD 242, the student should be able to:

1. Apply safe, correct radiographic technique and positioning, with emphasis on operating room examinations.
2. Correctly adapt technical factors to meet the clinical situation.
3. Correlate anatomy and physiology and radiographic procedures and techniques.
4. Apply introductory knowledge of clinical practice in either nuclear medicine or radiation therapy.
5. Carry out assigned radiographic procedures in the clinical area with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
6. Correlate anatomy and physiology and assigned radiographic procedures with 100 percent accuracy as determined by satisfactory clinical evaluation comments.
7. Meet clinical objectives.

RAD 248 Radiographic Film Critique III (1) Fall
1 hour lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 142; a grade of "C" or higher in RAD 150.
Corequisite(s): RAD 200; RAD 200L; RAD 210; RAD 240.
Comment: RAD 248 is offered in the fall semester only. Letter grade only. RAD 248 may not be taken credit/no credit. RAD 248 may not be audited.

RAD 248 is a problem-based seminar and focuses on advanced film critique stressing common procedures using contrast material as well as pediatric radiography.

Upon successful completion of RAD 248, the student should be able to:

1. Recognize and describe the prime factors of radiography and the factors that affect the radiographic quality of a film.
2. Discuss specific changes that could be made to the prime factors of radiography and the factors that affect radiographic film quality to improve the quality of specific films.
3. Correlate knowledge gained in lecture classes with factors that affect radiographic quality of a film.
4. Correlate knowledge of anatomy and physiology, including cross-sectional anatomy, with radiographic procedures performed during RAD 240.
5. Apply the knowledge gained in advanced radiographic procedures to critique radiographs.
6. Correlate basic knowledge of anatomy, physiology, cross-sectional anatomy, and pathology with radiographic technique.
7. Recognize the difference between diagnostic and poor quality radiographs.
8. Use a film evaluation procedure to explain how to improve the diagnostic quality of a radiograph.
9. Discuss radiographs based on factors governing recognition and differentiation.

RAD 249 Radiographic Film Critique IV (1) Spring
1 hour lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 200; a grade of "C" or higher in RAD 200L; a grade of "C" or higher in RAD 210; a grade of "C" or higher in RAD 240; a grade of "C" or higher in RAD 248.
Corequisite(s): RAD 230; RAD 230L; RAD 241; RAD 255.
Comment: RAD 249 is offered in the spring semester only. Letter grade only. RAD 249 may not be taken credit/no credit. RAD 249 may not be audited.

RAD 249 is a problem-based seminar, focusing on advanced film critique stressing films made during special procedures.

Upon successful completion of RAD 249, the student should be able to:

1. Recognize and describe the prime factors of radiography and the factors that affect the radiographic quality of a film.
2. Discuss specific changes that could be made to the prime factors of radiography and the factors that affect radiographic film quality to improve the quality of specific films.
3. Correlate knowledge gained in lecture classes with factors that affect radiographic quality of a film.
4. Correlate knowledge of anatomy and physiology, including cross-sectional anatomy, with radiographic procedures performed during RAD 241.
5. Apply the knowledge gained in special radiographic procedures to critique radiographs.
6. Correlate basic knowledge of anatomy, physiology, cross-sectional anatomy, and pathology with radiographic technique.
7. Identify the elements of thorough radiographic image evaluation.
8. Correctly assess image quality as optimal, diagnostic, or needs to be repeated.
9. Demonstrate self-confidence in personal abilities as a radiographer.

RAD 255 Applied Radiologic Principles (1) Spring
1 hour lecture per week
Prerequisite(s): A grade of "C" or higher in RAD 200; a grade of "C" or higher in RAD 200L; a grade of "C" or higher in RAD 210; a grade of "C" or higher in RAD 240; a grade of "C" or higher in RAD 248.
Corequisite(s): RAD 230; RAD 230L; RAD 241; RAD 249.
Comment: RAD 255 is offered in the spring semester only. Letter grade only. RAD 255 may not be audited. RAD 255 may not be taken credit/no credit.

RAD 255 focuses on synthesis and correlation of imaging techniques as related to basic principles of radiography and implications of emerging technology.

Upon successful completion of RAD 255, the student should be able to:

1. Describe all aspects of radiographic imaging principles and procedures.
2. Describe the impact of emerging technology in diagnostic imaging on radiologic technology.
3. Demonstrate proficiency in all areas of radiologic technology by satisfactory performance on simulated registry examinations.

RAD 260 Radiation Biology and Protection (2) Summer
4 hours lecture per week for eight weeks
Prerequisite(s): A grade of "C" of higher in RAD 230; a grade of "C" of higher in RAD 230L; a grade of "C" of higher in RAD 241; a grade of "C" of higher in RAD 249; a grade of "C" of higher in RAD 255.
Corequisite(s): RAD 242.
Comment: RAD 260 is offered in the summer only. Letter grade only. RAD 260 may not be audited. RAD 260 may not be taken credit/no credit.

RAD 260 focuses on effects of ionizing radiation in biologic systems; application to radiography, radiation therapy, and nuclear medicine; importance of minimizing exposure and proper techniques.

Upon successful completion of RAD 260, the student should be able to:

1. Describe the effects of ionizing radiation in a given biologic system.
2. Explain the importance of minimizing radiation exposure.
3. Cite the importance of specific proper techniques in minimizing exposure.
4. Knowledgeably discuss applications of radiobiology to radiography, radiation therapy, and nuclear medicine.

RELIGION

REL 150 Introduction to the World's Major Religions (3) KCC AA/FGC and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Qualification for ENG 100 or ESL 100.

REL 150 is a historical survey of the world's major religious traditions. The course is designed to provide students with an understanding of these traditions, and to enable students to think both sensitively and critically about the religious world.

Upon successful completion of REL 150, the student should be able to:

1. Identify the myths, rituals, ethics, and art of each major religious tradition.
2. Describe significant historical developments within each major religious tradition, from the time of its origins until today.
3. Describe his/her own religious background and that of the surrounding community.

REL 151 Religion and the Meaning of Existence (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Qualification for ENG 100 or ESL 100.

REL 151 introduces contemporary religious issues, their background and development, with an emphasis on the question, "What is the meaning of existence?"

Upon successful completion of REL 151, the student should be able to:

1. Describe the background and development of contemporary religious issues.
2. Identify contemporary religious responses to topics such as science, identity, suffering, death, and the meaning of existence.
3. Clearly express his/her own religious views and values.

REL 200 Understanding the Hebrew Bible (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.

REL 200 surveys the developing beliefs and practices of Judaism as set forth in the Hebrew Bible (Old Testament), with an emphasis on the multiple meanings of these texts in the contemporary world.

Upon successful completion of REL 200, the student should be able to:

1. Describe the historical and literary context of the Hebrew Bible.
2. Identify the major parts and different types of literature contained in the Hebrew Bible.
3. Analyze the ways in which the Hebrew Bible has shaped contemporary societies and human understandings of self.

REL 201 Understanding the New Testament (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.

REL 201 is an analysis of the origin and development of the early Christian message as set forth in the New Testament, with a special emphasis on Jesus and Paul.

Upon successful completion of REL 201, the student should be able to:

1. Describe the historical and literary context of the New Testament.
2. Identify the major parts and types of literature contained in the New Testament.
3. Analyze the ways in which New Testament teachings have shaped contemporary societies and human understandings of self.

REL 202 Understanding Indian Religions (3) AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.

REL 202 is a historical survey of the major religious traditions of India. The course explores the evolution of Indian religious beliefs and practices with an emphasis on understanding the historical roots of contemporary religious diversity in India.

Upon successful completion of REL 202, the student should be able to:

1. Identify the main historical events, periods, texts and personalities in the development of the major religious traditions of India.
2. Describe the basic characteristics of the major religious traditions of India, including their myths, rituals, ethics and art.
3. Analyze religious topics from India in light of South Asia's historical, regional, ethnic and sectarian diversity.

REL 209 Understanding Islam (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.
Comment: REL 209 was formerly REL 220.

REL 209 is a historical survey of Islam. The course explores the evolution of Muslim beliefs and practices around the world with an emphasis on understanding the historical roots of contemporary diversity within Islam.

Upon successful completion of REL 209, the student should be able to:

1. Identify the major historical events, periods, texts and personalities in the development of Islam.
2. Describe the basic universal elements of Islam, including its myths, rituals, ethics and art.
3. Analyze phenomena from the Muslim world in light of Islam's historical, regional, ethnic and sectarian diversity.

REL 210 Understanding Christianity (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.

REL 210 is a historical survey of Christianity. The course explores the evolution of Christian beliefs and practices around the world with an emphasis on understanding the historical roots of contemporary diversity within Christianity.

Upon successful completion of REL 210, the student should be able to:

1. Identify the major historical periods, texts, and personalities in the development of Christianity.
2. Describe the differences between major traditional and non-traditional denominations of Christianity.
3. Describe the historical, cultural, social and technological pressures on Christianity that have brought about significant changes in the tradition.

REL 215 Contemporary Religions (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: REL 150.
Comment: REL 215 was formerly REL 209.

REL 215 explores the development of new religions and contemporary transformations of traditional religions.

Upon successful completion of REL 215, the student should be able to:

1. Identify social pressures and influences that have transformed the contemporary religious landscape.
2. Describe the distinguishing characteristics of traditional religions and new religions and provide contemporary examples of each.
3. Analyze contemporary religious trends and movements in light of modern technology, globalization, human population shifts and/or environmental concerns.

REL 222 Religion and Conflict in the Modern Era (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100 or ESL 100.
Recommended Preparation: HIST 151, HIST 152, or REL 150.
Comment: REL 222 is cross-listed as HIST 222.

REL 222 is a historical analysis of the relationship between religion and conflict in the modern era. The course explores the ways in which religion has served to create, exacerbate, and/or legitimate violent conflict since 1800. Each semester, the course examines at least three religion-based conflicts from different parts of the world, including Asia, Africa, the Middle East, Europe, and the Americas.

Upon successful completion of REL 222, the student should be able to:

1. Describe the historical origins and evolution of various religious conflicts in the modern era.
2. Analyze the ways in which religious myths, rituals and ethics have fueled various conflicts in the modern era.
3. Assess the essential characteristics of religious conflicts in the modern era and the implications of those characteristics for the resolution of current and future religious conflicts.

RESPIRATORY CARE

RESP 100 Respiratory Care Profession (1)
1 hour lecture per week

RESP 100 introduces students to Respiratory Care as an allied health field and defines the role of the Respiratory Care Practitioner in patient care and as a member of the health care team; provides basic knowledge of health care systems and settings, national and state organizational structure, credentialing and licensing, and ethical considerations; and introduces fundamental patient care concepts, procedures, aids, and terminology.

Upon successful completion of RESP 100, the student should be able to:

1. Describe the history and development of Respiratory Care as a profession.
2. Describe the role of the Respiratory Care Practitioner as a member of a health care team.
3. Describe the role of other health care workers in patient care.
4. State the importance of ethics in clinical practice.
5. Discuss ethical concerns facing Respiratory Care and other health care practitioner.
6. Describe the role of a Respiratory Care or Cardiopulmonary Department within the organizational structure of a hospital or health care facility.
7. Describe the role of Respiratory Care in the outpatient setting.

8. Demonstrate an understanding of community-based health care by examining a community-based health agency.
9. Explain the differences between licensure and credentialing in Respiratory Care.

RESP 101 Sciences for Respiratory Care (3)
3 hours lecture per week
Recommended Preparation: College level reading and mathematics ability.

RESP 101 focuses on basic sciences for the beginning student in respiratory care. This course will include principles of physics, infection control, computer skills, and evidence-based medicine that apply to healthcare.

Upon successful completion of RESP 101, the student should be able to:

1. Describe gas laws.
2. Perform calculations using gas laws.
3. Define scientific terms related to physics and chemistry.
4. Describe infection control techniques used in healthcare.
5. Use email with attachments.
6. Develop an electronic presentation (i.e. Powerpoint).
7. Develop a simple spreadsheet.
8. Perform internet searches.
9. Define evidence-based medicine.
10. Utilize principles of evidence-based medicine to research selected topics in respiratory care.

RESP 200 Cardiopulmonary Pathophysiology (3) Fall
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: RESP 200 may not be taken credit / no credit. RESP 200 may be audited only upon approval of Respiratory Program Director and Instructor. RESP 200 is offered only in the Fall semester.

RESP 200 examines common cardiopulmonary disease processes while exploring the relationship between pathophysiology and therapeutic interventions.

Upon successful completion of RESP 200, the student should be able to:

1. Define and describe fundamental characteristics of cardiopulmonary diseases and conditions.
2. Discuss etiology, pathology, diagnosis, management, and prognosis of common cardiopulmonary diseases.
3. Match chronic cardiopulmonary diseases to appropriate rehabilitative techniques.
4. Define abnormal lab values as they relate to specific diseases.
5. Discuss traumatic injuries to the chest wall.
6. Describe common pathology seen on chest x-ray exam.

RESP 201 Cardiopulmonary Anatomy and Physiology (3)
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program.

RESP 201 provides an in-depth study of the anatomy and physiology of the heart, lungs, and associated structures including an introduction to cardiac electrophysiology and lung volumes and capacities.

Upon successful completion of RESP 201, the student should be able to:

1. Describe the structure and function of the heart, lungs, and related body systems.
2. Discuss the process of respiration.
3. Demonstrate knowledge of electrophysiology through rhythm recognition.
4. State the function of blood, vessels, and the heart.
5. Name the structures in the heart and lung and describe their location in the body.
6. Describe the gross and microscopic anatomy of the lung.
7. Describe lung volumes and capacities.

8. Interpret normal pulmonary function test values.
9. Perform physiologic calculations.

RESP 202 Clinical Practice I (5) Fall
16 hours lab or clinical per week
Prerequisite(s): Acceptance into the Respiratory Care Program.
Comment: RESP 202 may not be taken credit/no credit. RESP 202 may be audited only upon approval of the Respiratory Care Program Director and Instructor. RESP 202 is offered only in the Fall semester. Uniform, school patch, scissors, and stethoscope are required. A professional fee of up to $500.00 is charged.

RESP 202 introduces students to basic respiratory care skills and procedures including charting, medications, oxygen and aerosol therapy, lung inflation therapy, and secretion management.

Upon successful completion of RESP 202, the student should be able to:

1. Perform routine physical assessment on the cardiopulmonary patient.
2. Document results of the patient's assessment and response to therapy in the patient's record.
3. Monitor and evaluate the patient's response to respiratory therapy.
4. Communicate the patient's respiratory care plan, response to therapy, and progress to other members of the health care team.
5. Collect the necessary supplies, test for equipment function, and administer oxygen, humidification, and aerosol devices.
6. Measure respiratory care medications as ordered and administer using the appropriate devices.
7. Perform secretion management techniques such as chest percussion and postural drainage and positive pressure adjuncts.
8. Perform hyperinflation techniques such as intermittent positive pressure breathing and incentive spirometry.
9. Instruct patient on proper breathing and coughing techniques.
10. Discuss the role of the respiratory care practitioner as part of the health care team.
11. Apply universal precaution in the patient care setting.

RESP 203 Respiratory Care Techniques I (3) Fall
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care Program.
Comment: RESP 203 may not be taken credit / no credit. RESP 203 may be audited only upon approval of Respiratory Program Director and Instructor. RESP 203 is offered in the Fall semester only.

RESP 203 introduces students to respiratory care knowledge and techniques including charting, medications, oxygen therapy, lung inflation therapy, and secretion management.

Upon successful completion of RESP 203, the student should be able to:

1. Review a patient's record for respiratory care orders and pertinent data.
2. Collect and evaluate additional pertinent clinical data to evaluate the patient's clinical status.
3. Select, assemble, and check equipment for proper function that are used in oxygen administration, humidification, and aerosol delivery.
4. Define or describe the following prescribed therapies: medical gas therapy, humidity and aerosol therapy, PAP therapy (positive airway pressure therapy), chest percussion and postural drainage therapy, lung inflation therapy.
5. State the goals of each of the prescribed therapies.
6. State the indications/contraindications of each of the prescribed therapies.
7. State the hazards/complications of each of the prescribed therapies.
8. Explain the proper method of providing the prescribed therapies.
9. State the method(s) of evaluation and monitoring of the patient's response to each of the prescribed therapies.
10. Evaluate and modify prescribed therapy for non-critically ill patients.
11. Explain the process of cardiopulmonary resuscitation. Maintain records and communication using conventional terminology as required by hospital policy and regulatory agencies.
12. Demonstrate a concept or principle related to RESP 203 in a project.
13. Present the project to a non-medical audience.

RESP 211 Introduction to Mechanical Ventilation (2)
4 hours lecture/lab per week
Prerequisite(s): Acceptance into the Respiratory Care Program.
Comment: RESP 211 may not be taken credit /no credit. RESP 211 may be audited only upon approval of Respiratory Program Director and Instructor.

RESP 211 introduces students to the concepts and principles of mechanical ventilation.

Upon successful completion of RESP 211, the student should be able to:

1. List the physiological indications for mechanical ventilation.
2. List the criteria for instituting mechanical ventilation.
3. List the hazards/complications of mechanical ventilation.
4. Describe the physiological effects of positive pressure.
5. Explain the concepts of compliance and resistance.
6. Perform math calculations used in mechanical ventilation.
7. Discuss the appropriate settings when initiating mechanical ventilation.
8. Describe the different modes of conventional mechanical ventilation: Control, Asist-Control (A/C), Synchronized Intermittent Mechanical Ventilation (SIMV), Pressure Support Ventilation (PSV), Pressure Control Ventilation (PCV), Pressure Control Inverse Ratio Ventilation (PCIRV).
9. Explain the different methods of triggering and cycling the ventilator.
10. Explain the different phases of inspiration and exhalation of Continuous Mechanical Ventilation (CMV).
11. Diagram the different graphic waveforms of ventilation.
12. Explain how graphic waveforms are used in mechanical ventilation.
13. Explain the differences between Intermittent Positive Pressure Breathing (IPPB), Pressure Support (PS), and Pressure Control (PC).
14. Explain the effect of flow wave patterns on the inspiratory flowrate of flow variable ventilators.
15. Explain the maintenance of patient-ventilator interface.
16. Describe various methods of weaning and extubation procedures.
17. Discuss the role of the Respiratory Care Practitioner in the ICU environment.
18. Explain the concept of open-lung inflation Rx.
19. Explain the effects of Continuous Positive Airway Pressure (CPAP) and Positive End Expiratory Pressure (PEEP) therapy on improving oxygenation.
20. Describe the procedure for using and titrating Continuous Positive Airway Pressure (CPAP) and Positive End Expiratory Pressure (PEEP).
21. Describe the procedure of using Bilevel Positive Airway Pressure (BiPAP).
22. Explain the concepts of Inspiratory Positive Airway Pressure (IPAP) and Expiratory Positive Airway Pressure (EPAP).
23. Apply concepts of mechanical ventilation into a clinical simulation.

RESP 212 Clinical Practice II (5) Spring
16 hours lab or clinical per week
Prerequisite(s): Acceptance into the Respiratory Care Program.
Comment: Letter grade only. RESP 212 may not be taken credit/no credit. RESP 212 may be audited only upon approval of the Respiratory Care Program Director and Instructor. RESP 212 will only be offered in Spring semesters. Uniform, school patch, scissors, and stethoscope are required. A professional fee of up to $500.00 is charged.

RESP 212 introduces students to advanced respiratory care skills and procedures including airway management, mechanical ventilation, arterial puncture, and patient transport.

Upon completion of RESP 212, the student should be able to:

1. Perform routine physical assessment on the critically ill patient in the intensive care unit.
2. Interpret and evaluate diagnostic tests such as Arterial Blood Gases, electrolytes, and chest x-rays.
3. Document results of the patient's assessment and diagnostic tests in the patient's record.
4. Communicate the patient's respiratory care plan, response to therapy, and progress to other members of the health care team.
5. Perform suctioning through tracheostomy and endotracheal tubes (ETT).
6. Perform tracheostomy care.
7. Perform manual ventilation with self-inflating bag.
8. Select and insert oral and nasal airways to maintain airway patency.
9. Inflate and measure endotracheal and tracheostomy tube cuff pressures.
10. Securing the ETT with cloth tape or other appropriate devices.
11. Perform bedside ventilatory assessment such as Negative Inspiratory Force (NIF), Tidal Volume (TV), Vital Capacity (VC), and minute volume.

12. Set-up and test for function the mechanical ventilator prior to patient use.
13. Adjust ventilator settings per order or protocol.
14. Check and document ventilator-patient interface.
15. Administer respiratory care medications to mechanically ventilated patients.
16. Monitor and evaluate the patient's response to respiratory therapy.
17. Discuss the role of the respiratory care practitioner as part of the health care team in the intensive care unit (ICU).

RESP 213 Respiratory Care Techniques II (3) Spring
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care Program.
Comment: Letter grade only. RESP 213 may not be taken credit / no credit. RESP 213 may be audited only upon approval of Respiratory Program Director and Instructor. RESP 213 will only be offered in Spring semesters.

RESP 213 introduces students to advanced respiratory care knowledge and techniques including assessment, hemodynamics, gas exchange, and other diagnostic studies.

Upon successful completion of RESP 213, the student should be able to:

1. Evaluate information from physical assessment of the critically ill patient on mechanical ventilation.
2. Describe the procedure for and importance of ventilation assessment.
3. Interpret and evaluate relevant diagnostic information as it relates to the patient's condition: ventilation, oxygenation, acid-base balance, chest radiograph, clinical laboratory studies, electrocardiogram, mixed venous saturation, cardiac output.
4. Evaluate the hemodynamic measurements as they relate to the patient's condition.
5. Explain the clinical implications of using invasive and noninvasive pulmonary and cardiac monitoring to assess the critically ill patient.
6. Discuss the importance of nutrition of the critically ill patient on mechanical ventilation.
7. Discuss clinical case studies of common cardiopulmonary diseases.
8. Describe the inductive thinking process when evaluating clinical cases and organizing clinical information.

RESP 218 Cardiopulmonary Pharmacology (3)
3 hours lecture per week

RESP 218 focuses on pharmacologic principles of drugs used in the ER and ICU settings as well as an overview of general principles of pharmacology. This course supports other courses where students learn how to deliver medications and assess response to those medications.

Upon successful completion of RESP 218, the student should be able to:

1. Describe drugs administered by the RCP in terms of indications, actions, routes, doses, delivery systems, and adverse reactions.
2. Discuss specialized equipment and techniques used to administer cardiorespiratory medications.
3. State basic principles of pharmacodynamics.
4. Recommend changes in medication, dose, or delivery systems.
5. Select appropriate medications and delivery systems based on pathophysiology and case interpretation.
6. Recommend appropriate cardiac and emergency drugs.
7. Calculate drug dosages.

RESP 222 Clinical Practice III (5)
An average of 32 clinical hours per week for 10 weeks
Prerequisite(s): Acceptance into the Respiratory Care Program.
RESP 222 enables students to implement advanced respiratory care skills and procedures in the hospital setting.

Upon successful completion of RESP 222, the student should be able to:

1. Perform routine physical assessment on the critically ill patient in the intensive care unit.
2. Interpret and evaluate diagnostic tests such as arterial blood gases, electrolytes, and chest x-rays.
3. Document results of the patient’s assessment and diagnostic tests in the patient’s record.
4. Communicate the patient’s respiratory care plan, response to therapy, and progress to other members of the health care team.
5. Perform suctioning through tracheostomy and endotracheal tubes (ETT).
6. Perform tracheostomy care.
7. Perform manual ventilation with self-inflating bag.
8. Select and insert oral and nasal airways to maintain airway patency.

9. Inflate and measure endotracheal and tracheostomy tube cuff pressures. Secure the ETT with cloth tape or other appropriate devices.
10. Perform bedside ventilatory assessment such as Negative Inspiratory Force, Tidal Volume, Vital Capacity, and minute volume.
11. Set-up and test for function the mechanical ventilator prior to patient use.
12. Adjust ventilator settings per order or protocol.
13. Check and document ventilator-patient interface.
14. Administer respiratory care medications to mechanically ventilated patients.
15. Monitor and evaluate the patient's response to respiratory therapy.
16. Communicate with mechanically ventilated patient and relay his or her needs to other members of the health care team.

RESP 229 Advanced Cardiac Life Support (2)
2 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program
Comment: Letter grade only. RESP 229 may not be audited. RESP 229 may not be taken credit/no credit. Fees are required for RESP 229 for ACLS certification and for the advanced ECG portion of the course. Fees are approximately $200 in addition to texts.

RESP 229 is a course that certifies students in advanced cardiac life support (ACLS) technique and theory utilizing the program developed by the American Heart Association. Students will also learn to perform and interpret 12-lead ECG's.

Upon successful completion of RESP 229, the student should be able to:

1. Describe drugs administered by the RCP in terms of indications, actions, routes, doses, delivery systems, and adverse reactions.
2. Apply ACLS algorithms in the 10 required cases.
3. Recommend changes in medication, dose, or delivery systems.
4. Select appropriate medications and delivery systems based on pathophysiology and case interpretation.
5. Recommend appropriate cardiac and emergency drugs.
6. Calculate drug dosages.
7. Complete the ACLS final exam with a passing score.
8. Perform 12 lead ECG and interpret rhythms.
9. Perform advanced airway management techniques.
10. Utilize the AED/Defibrillator to deliver electric therapy to the heart.
11. Successfully complete ACLS certification.
12. Discuss ethical implications of advanced life support.

RESP 301 Neonatal/Pediatric Respiratory Care (3)
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program
Comment: Letter grade only. RESP 301 may not be audited. RESP 301 may not be taken credit/no credit. Uniform, school patch, and stethoscope are required.

RESP 301 is an introduction to the concepts and principles of neonatal and pediatric respiratory care as they relate to clinical application.
Upon successful completion of RESP 301, the student should be able to:

Module 1

1. Describe fetal anatomy and physiology.
2. Identify the landmarks of the maternal-fetal circulation.
3. Explain the maternal-fetal circulation.
4. Describe the path of oxygenated blood from maternal (placenta) through the fetal circulation.
5. List maternal factors that may affect the health of the fetus.
6. Identify the components of the APGAR score.
7. Identify (2) scoring systems used in gestational age assessment.
8. Identify the components of the Silverman score and explain how it is used to assess respiratory distress of the neonate.
9. Explain the physiological changes that immediately occur after a normal birth with respect to: ductus arteriosus, ductus venosus, foramen ovale, PVR, SVR.
10. Explain the following terms with respect to labor and delivery: parturition, cervix, effacement, dilatation, para/ gravida, primigravida, multigravida, breech, placenta previa, abruptio placentae, polyhydramnios, oligohydramnios, meconium.
11. Explain the following terms with respect to normal gestational age: birth weight (premature v. term), respiratory rate, heart rate, blood pressure, vernix, lanugo.

Module 2

1. Identify the following pharmacologic agents used to: inhibit or promote uterine contractions (oxytocin v. tocolysis), affect the immature lung and circulation (indomethacin, N2O, surfactant), treat viral infections, treat pulmonary infections, treat hyperreactive airways.
2. Identify and explain pediatric respiratory care equipment: SPAG, oxygen hood, tents, nasal CPAP, suction (bulb, Deelee).

Module 3

1. Explain the etiology, pathophysiology, and treatment (if any) of the following diseases: pulmonary dysmaturity (Wilson-Mikity syndrome), cystic fibrosis, Reye's syndrome, meconium aspiration, retinopathy of prematurity, transient tachypnea of the newborn, bronchopulmonary dysplasia, laryngotracheobronchitis, epiglottitis, bronchiolitis, respiratory distress syndrome.
2. Explain the etiology, pathophysiology, and treatment (if any) of congenital heart defects: Tetralogy of Fallot, persistent fetal circulation, patent ductus arteriosus, patent foramen ovale.

Module 4

1. Care for the critically ill neonatal/pediatric patient: describe the technique for using a flow inflating resuscitation bag, explain how tube sizes for intubation are selected (size v. weight v. gestational age), explain time cycled pressure limited ventilation (conventional in neonatal/pediatric practice), describe the initial settings used in conventional mechanical ventilation used in the NICU/PICU, explain the ventilator parameter changes that are needed based on ABG values.
2. Explain the purposes of the following special procedures:
    - surfactant replacement Rx, inhaled nitric oxide, high
    - frequency ventilation, HFJV, HFOV, transillumination of the chest.
3. Explain the process used in resuscitation with respect to NRP/PALS.
4. Explain the clinical uses of and limitations of transcutaneous monitoring.

RESP 302 Clinical Practice IV (4)
12 hours per week hospital practice
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: Letter grade only. RESP 302 may not be audited. RESP 302 may not be taken credit/no credit. Uniform, school patch, and stethoscope are required.

RESP 302 is an introductory course in application of neonatal/pediatric respiratory care skills and procedures in the clinical setting.
Upon successful completion of RESP 302, the student should be able to:

1. Perform routine physical assessment on premature, full term newborn, and pediatric patients.
2. Perform routine physical assessments on pediatric patients in the medical ward.
3. Interpret and evaluate diagnostic tests such as ABG's, capillary blood stick, and chest x-rays.
4. Document results of the patient's assessment and response to therapy in the patient's record.
5. Monitor and evaluate the patient's response to respiratory therapy.
6. Communicate the patient's respiratory care plan, response to therapy, and progress to other members of the health care team.
7. Collect the necessary supplies, test for equipment function, and administer oxygen, humidification, and aerosol devices.
8. Measure respiratory care medications as ordered and administer using the appropriate devices.
9. Monitor and evaluate the patient's response to respiratory therapy.
10. Perform secretion management techniques such as chest percussion and postural drainage.
11. Document results of the patient's assessment and diagnostic tests in the patient's record.
12. Perform nasotracheal suctioning.
13. Perform manual ventilation with self-inflating and flow-inflating bag.
14. Monitor neonatal/pediatric patients via the HR and EKG monitor, TCM, and ETCO2 monitor.
15. Setup a nasal CPAP.
16. Perform patient-ventilator checks in the NICU/PICU.
17. Assist in patient-ventilator transport.
18. Communicate with the pediatric patient and relay his or her needs to other members of the health care team.
19. Discuss the role of the respiratory care practitioner as part of the health care team in the NICU, PICU, medical ward.
20. Apply universal precaution in the patient care setting.
21. Attend rounds, physician and respiratory care departmental inservices.

RESP 312 Clinical Practice V (4)
12 hours clinical per week for 15 weeks
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: Letter grade only. RESP 312 may not be audited. RESP 312 may not be taken credit/no credit. Uniform, school patch, and stethoscope are required.

RESP 312 consists of diagnostic laboratory observation and supervised experiences with emphasis on performing diagnostic tests correctly and safely.

Upon successful completion of RESP 312, the student should be able to:

1. Perform routine pulmonary function tests.
2. Perform advanced pulmonary function tests under supervision.
3. Observe diagnostic bronchoscopy and, under supervision, assist with procedure.
4. Observe and assist, under supervision, with cardiopulmonary exercise testing.
5. Observe and assist, under supervision, with polysomnographic examinations.
6. Observe and assist, under supervision, with neurodiagnostic examinations.
7. Perform preventive maintenance and calibrations of cardiopulmonary diagnostic equipment.
8. Correlate anatomy and physiology of the cardiopulmonary system with procedures and techniques.
9. Recognize, describe, and change factors that affect the quality of a diagnostic test.

RESP 316 Cardiopulmonary Diagnostics (3)
3 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: Letter grade only. RESP 316 may not be audited. RESP 316 may not be taken credit/no credit.

RESP 316 introduces students to pulmonary laboratory procedures and techniques including the Blood Gas Laboratory, Bronchoscopic Lung examination, Pulmonary Function Laboratory, Sleep Laboratory, and Neurodiagnostic examinations. RESP 316 emphasizes testing methods and protocols, interpretation of test results and correlation to disease states and appropriate therapeutic intervention.

Upon successful completion of RESP 316, the student should be able to:

1. Define the role of cardiopulmonary diagnostics in patient care.
2. Describe, evaluate, and interpret arterial blood gas analysis, pulmonary function tests, polysomnographic tests, cardiopulmonary exercise tests, and neurodiagnostic exams.
3. Describe and discuss the fundamentals of a lung bronchoscopic exam.
4. Describe and discuss arterial blood gas sampling procedures, including the care and maintenance of analyzers, cooximeters, and blood gas electrodes.
5. Explain methods to diagnose lung volumes, capacities, diffusion.
6. Explain methods and protocols to diagnose sleep related disorders.
7. Explain methods and protocols to diagnose neurodiagnostic disorders.
8. Explains methods and protocols for cardiopulmonary exercise testing.

RESP 320 Respiratory Care Seminar I (4)
4 hours lecture per week
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: Letter grade only. RESP 320 may not be audited. RESP 320 may not be taken credit/no credit. Fees are required for RESP 320 for practice examinations. The current cost is $150.

RESP 320 reviews the field of respiratory care in preparation for board examinations upon graduation. This course enables the advanced student to appropriately gather information and make clinical decisions in the entire spectrum of patient care using computer and problem-based learning.

Upon successful completion of RESP 320, the student should be able to:

1. Complete 30 computerized clinical simulations covering 10 major content areas.
2. Complete the National Board for Respiratory Care on-line Entry-Level Self-Assessment Examination.
3. Complete the National Board for Respiratory Care on-line Written Registry Self-Assessment Examination.
4. Complete the National Board for Respiratory Care on-line Clinical Simulation Self-Assessment Examination.
5. Develop a study plan for the Entry-Level Certified Therapist Examination.
6. Complete 3 practice entry-level and written registry examinations.

7. Relate diagnosis, clinical condition, physical findings, therapeutic interventions and modifications per the Examination Matrices of the National Board for Respiratory Care.
8. Select, assemble, and maintain equipment per the Examination Matrices of the National Board for Respiratory Care.

RESP 322 Clinical Practice VI (4)
12 hours clinical per week (hospital practice)
Prerequisite(s): Acceptance into the Respiratory Care program.
Comment: Letter grade only. RESP 322 may not be audited. RESP 322 may not be taken credit/no credit. Uniform, school patch, and stethoscope are required.

RESP 322 is a hospital-based course in application of advanced respiratory care skills and procedures. Students are expected to consistently perform at an advanced level all skills learned in previous Respiratory Care courses.

Upon successful completion of RESP 322, the student should be able to:

1. Perform routine physical assessment on the critically ill patient in the intensive care unit.
2. Interpret and evaluate diagnostic tests such as ABG's, electrolytes, and chest x-rays.
3. Calculate shunt, deadspace, static compliance and airway resistance.
4. Evaluate hemodynamic parameters such as CVP, SVR, PVR, MAP, PCWP, CO, and CI.
5. Identify basic abnormal and life-threatening EKG patterns.
6. Document results of the patient's assessment and diagnostic tests in the patient's record.
7. Communicate the patient's respiratory care plan, response to therapy, and progress to other members of the health care team.
8. Perform suctioning through tracheostomy and endotracheal tubes (ETT).
9. Perform tracheostomy care.
10. Perform manual ventilation with self-inflating bag.
11. Select and insert oral and nasal airways to maintain airway patency.
12. Inflate and measure endotracheal and tracheostomy tube cuff pressures.
13. Secure the ETT with cloth tape or other appropriate devices.
14. Perform bedside ventilatory assessment such as NIF, TV, VC, and minute volume.
15. Set-up and test for function the mechanical ventilator prior to patient use.
16. Initiate and manage a new ventilator patient in the intensive care unit (ICU).
17. Manage at least (3) ventilator patients in the ICU.
18. Adjust ventilator settings per ABG's.
19. Make clinical recommendations based on various patient data.
20. Identify and troubleshoot common ventilator problems.
21. Wean patient off the ventilator following weaning protocols.
22. Perform ABG stick and draw arterial blood from an arterial line.
23. Check and document ventilator-patient interface.
24. Administer respiratory care medications to mechanically ventilated patients.
25. Monitor and evaluate the patient's response to respiratory therapy.
26. Identify the actions of common medications used in the ICU: antimicrobial agents, paralyzing agents, respiratory stimulants/depressants, and analgesics/anesthetics.
27. Communicate with mechanically ventilated patient and relay his or her needs to other members of the health care team.
28. Discuss the role of the respiratory care practitioner as part of the health care team in the ICU.
29. Apply universal precaution in the patient care setting.
30. Attend ICU rounds and physician and respiratory care departmental inservices.

SAMOAN

SAM 50 Basic Conversational Samoan (3) (Inactive)
3 hours lecture per week

SAM 50 is an introduction to basic conversational Samoan incorporating useful everyday expressions. Practical vocational vocabulary will also be introduced. Samoan culture will be integrated into the study of the language.

Upon successful completion of SAM 50, the student should be able to:

1. Recognize 35 Samoanized English words.
2. Reproduce orally 15 everyday greetings.

3. Demonstrate orally the counting system of numbers in Samoan.
4. Name 6 basic colors in Samoan.
5. List of months, weeks, and days in Samoan.
6. Recognize Samoan food in a store and be able to name them.
7. Demonstrate how to accurately ask for geographical directions.
8. Identify 20 parts of the human body in Samoan.
9. Tell time and correctly ask for the time in Samoan.
10. Recognize Samoan non-verbal communication using head, eyebrows, fingers, and shoulders.

SCIENCE

SCI 295 (Alpha) STEM Research Experience (1 - 3) KCC AA/DY
3 hours cooperative education/work experience per week per credit
Prerequisite(s): Instructor consent.
Recommended Preparation: Completion of a lab science course as stipulated by the instructor.
Comment: Letter grade only. SCI 295 (alpha) may not be audited. SCI 295 (alpha) may not be taken credit/no credit.

SCI 295 (alpha) offers a research experience in science, technology, engineering and/or mathematics, emphasizing the application of the scientific method to a specific project.

Upon successful completion of SCI 295, the student should be able to:

1. Formulate a hypothesis.
2. Design methods to test a hypothesis.
3. Collect and analyze data as appropriate.
4. Document and formally present results of hypothesis testing to an audience.
5. Enhance understanding of scientific concepts.
6. Collaborate as a member of a research team.
7. Work responsibly in a lab setting.

SCI 295MI STEM Research Experience in Microbiology and/or Molecular Biology (1 - 3) KCC AA/DY
3 hours cooperative education/work experience per week per credit
Prerequisite(s): Instructor consent.
Recommended Preparation: Completion of a microbiology and/or molecular biology lab science course as stipulated by the instructor.
Comment: Letter grade only. SCI 295MI may not be audited. SCI 295MI may not be taken credit/no credit.

SCI 295MI offers a research experience in science, technology, engineering and/or mathematics, emphasizing the application of the scientific method to a specific project in microbiology and/or molecular biology.

Upon successful completion of SCI 295MI, the student should be able to:

1. Formulate a hypothesis.
2. Design methods to test a hypothesis.
3. Collect and analyze data as appropriate.
4. Document and formally present results of hypothesis testing to an audience.
5. Enhance understanding of scientific concepts.
6. Collaborate as a member of a research team.
7. Work responsibly in a lab setting.

SECOND LANGUAGE TEACHING

SLT 102 Language Learning (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 102 introduces the post-method viewpoint of learning in the classroom. The course will begin with identifying the students' intuitions and insights about language learning. Students will then examine different language learning goals and needs as well as explore some basic needs in order for language to be acquired and factors that can accelerate or hinder language learning. In the second portion of the course, students will be introduced to ethnographic case studies of language learners and learn how to do their own ethnographic study on an individual or on one group of student language learners.

Upon successful completion of SLT 102 Language Learning, the student should be able to:

1. Describe the language development cycle, including each stage
2. Describe the various language learning frameworks commonly found in educational settings
3. Describe the various motivational and socio-cultural characteristics of language learners
4. Create scenarios of various language learning situations
5. Complete an ethnographic study of a language learner including:
    - Observation
    - Interview
    - Artifact collection
    - Secondary research
    - Data analysis
    - Data reporting

SLT 103 Language Teaching (3) KCC AA/DS
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 103 introduces the post-method viewpoint of teaching in the classroom. The course will begin by identifying the students' intuitions and insights about language teaching. The students will examine ways that instruction can facilitate and accelerate language learning. The students will explore how heritage language, motivation, learning styles, variation in input, etc. can influence their teaching. As the students address the issues of language teaching, they will develop their own definitions of second language pedagogy. In the second portion of the course, students will be introduced to ethnographic case studies of language teachers and learn how to do their own ethnographic study on one teacher's classroom practices.

Upon successful completion of SLT 103 Language Teaching, the student should be able to:

1. Describe language teaching in the context of the language development cycle, including each stage
2. Describe the various language teaching frameworks commonly found in educational settings
3. Describe how the various motivational and socio-cultural characteristics of language learners can influence their teaching
4. Describe their own definitions of second language pedagogy
5. Complete an ethnographic study of a language teacher including:
    - Observation
    - Interview
    - Artifact collection
    - Secondary research
    - Data analysis
    - Data reporting

SLT 202 (Alpha) Concepts and Issues in SLT (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100; a grade of "C" or higher or concurrent enrollment in SLT 102, consent of instructor.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 202 (Alpha) continues the exploration of classroom-based language development. SLT 202 (Alpha) students begin the course by exploring language skills from various perspectives and investigating the different ways that research and experts view instruction of language skills in various classroom settings. SLT 202 (Alpha) students also explore the relationship between pedagogy and language skills development and compile a portfolio of strategies for helping learners develop language skills.

Upon successful completion of SLT 202 (Alpha), the student should be able to:

1. Describe language skills from various perspectives
2. Discuss concepts and issues associated with the instruction of language skills in various classroom settings
3. Create and implement lesson plans, activities, and materials that are appropriate for developing language skills in various classroom settings
4. Compile a teaching strategies portfolio that contains lesson plans, activities, and materials for developing language skills in various classroom settings

SLT 202B Concepts and Issues in SLT – Language Skills (3) KCC AA/DH
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100; a grade of "C" or higher or concurrent enrollment in SLT 102, consent of instructor.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 202B continues the exploration of classroom-based language development. SLT 202B students begin the course by exploring language skills from various perspectives and investigating the different ways that research and experts view instruction of language skills in various classroom settings. SLT 202B students also explore the relationship between pedagogy and language skills development and compile a portfolio of strategies for helping learners develop language skills.

Upon successful completion of SLT 202B, the student should be able to:

1. Describe language skills from various perspectives
2. Discuss concepts and issues associated with the instruction of language skills in various classroom settings
3. Create and implement lesson plans, activities, and materials that are appropriate for developing language skills in various classroom settings
4. Compile a teaching strategies portfolio that contains lesson plans, activities, and materials for developing language skills in various classroom settings

SLT 203 (Alpha) Integrating Content and SLT (3)
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100; a grade of "C" or higher or concurrent enrollment in SLT 103, consent of instructor.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 203 (Alpha) introduces students to strategies for using content to facilitate second language development. SLT 203 (Alpha) students begin by exploring different strategies necessary for developing language in content classrooms. Then the students examine activities and materials appropriate for developing language skills in specific content areas, such as language arts, mathematics, science and social studies. The students also conduct case studies of a content classroom and develop activities, materials and lesson plans appropriate for facilitating language development in that setting.

Upon successful completion of SLT 203 (Alpha), the student should be able to:

1. Describe the strategies necessary for developing language through content
2. Describe critical issues for creating lesson plans to facilitate language development
3. Conduct case-study research on language learners in language classrooms including:
    a. Observation
    b. Analysis
    c. Reporting

4. Create and implement content-based activities, materials and lesson plans that are appropriate for particular language learners and contexts
5. Compile a teaching portfolio that contains activities, materials and lesson plans for facilitating language development

SLT 203B General Education (3)
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100; a grade of "C" or higher or concurrent enrollment in SLT 103, consent of instructor.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 203B introduces students to strategies for using content to facilitate second language development. SLT 203B students begin by exploring different strategies necessary for developing language using the content of general education classrooms. Then the students examine activities and materials appropriate for developing language skills in specific general education content areas, such as language arts, mathematics, science and social studies. The students also conduct a case study of a general education classroom and develop activities, materials and lesson plans appropriate for facilitating language development in that setting.

Upon successful completion of SLT 203B, the student should be able to:

1. Describe the strategies necessary for developing language using general education content
2. Describe critical issues for creating lesson plans and materials to facilitate language development using general education content
3. Conduct case-study research on language learners in various general education classrooms including:
    a. Observation
    b. Analysis
    c. Reporting
4. Create and implement content-based activities, materials and lesson plans that are appropriate for particular language learners in various general education classrooms
5. Compile a teaching portfolio that contains activities, materials and lesson plans for facilitating language development using general education content

SLT 290 Second Language Assessment (3)
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100, a grade of "C" or higher or concurrent enrollment in ESL 100; a grade of "C" or higher or concurrent enrollment in SLT 202, consent of instructor; a grade of "C" or higher or concurrent enrollment in SLT 203, consent of instructor.
Comment: Students must do Service Learning in the Education pathway as a requirement of this course.

SLT 290 introduces students to strategies for using assessment to facilitate second language development. SLT 290 students begin by examining issues associated with assessing content-area language needs of students. Then the students examine issues associated with assessing materials appropriate for facilitating language development of students in content-area classrooms. The students also do a study of language needs and activities in a content-area classroom.

Upon successful completion of SLT 290, the student should be able to:

1. Describe language standards at the national, state and local levels
2. Describe the various types of language assessment conducted in the content-area classroom
3. Conduct assessments of materials that are appropriate for facilitating language development in content-area classrooms
4. Conduct various types of survey research on language in content-area classrooms including:
5. Standards
    a. Needs
    b. Skills
    c. Peer and Self-Assessment
    d. Development
6. Compile a portfolio that contains materials assessments and survey research on language

SOCIAL SCIENCE

SSCI 21 Introduction to the Social Sciences I (3)
3 hours lecture per week

SSCI 21 is an exploration of contemporary social problems and issues as articulated by the various social sciences, emphasizing political science, sociology, economics and psychology.

Upon successful completion of SSCI 21, the student should be able to:

1. Enhance the student's appreciation of the social sciences.
2. Review the fundamental concepts of the social sciences; to use these to come to terms with contemporary social problems.
3. Stimulate the student to analyze, rather than simplistically criticize, the socio-political world about the student.
4. Enhance the student's ability to clarify one's own values regarding various social issues and phenomena.
5. Guide the student toward an understanding of social, economic, and political forces affecting one's life opportunities.
6. Encourage the student to explore psychological determinants of one's behavior and the emotional origins of one's meanings.

SSCI 200 Social Science Research Methods (3) KCC AA/DS and KCC AS/SS (Inactive)
3 hours lecture per week
Prerequisite(s): Credit or concurrent enrollment in ENG 100; credit or concurrent enrollment in MATH 24 or MATH 100 or higher level math or PHIL 110; credit or concurrent enrollment in 100 or 200 level social science course.
Comment: SSCI 200 is currently inactive.

SSCI 200 focuses on the various ways social scientists carry out research. Introduces research design methods, decision making with statistics, and the use of computers to assist with statistical analysis.

Upon successful completion of SSCI 200, the student should be able to:

1. Apply critical thinking skills to solve research problems.
2. Demonstrate the basic skills required to perform social science research in an applied field.
3. Demonstrate the techniques to perform elementary statistical analyses of data with computer assistance.

SSCI 260 Society and Food (3) KCC AA/DS, KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100

SSCI 260 provides a multidisciplinary introduction to the understanding of food and nutrition from broad social science perspectives with emphasis on global and historical contexts. The course integrates various social science perspectives as appropriate to examine sociocultural, political, geographic, economic, and psychological factors that influence social food habits as well as cultural patterns and variations in the production, consumption, and regulation of food. The course will explore food and nutrition in relation to central social science themes such as power, culture and ethnicity, class, identity, gender, sexuality, age, and food in relation to health and nutrition discourse.

Upon successful completion of SSCI 260, the student should be able to:

1. Identify and describe fundamental concepts, approaches, and contributions of social science disciplines to the study of food and nutrition.
2. Apply theory and social science inquiry processes to the analysis of how food habits, nutrition discourse, and consumption patterns are influenced by social factors such as age, gender, class, ethnicity, religion, culture, as well as global economic and political practices and interests.
3. Evaluate significant historical and contemporary technological, political, and economic developments, their impact on food production and consumption patterns and implications on health, nutrition, environment, and food insecurity in a global context.
4. Identify and describe cultural and economic forces on food and nutritional discourse in the creation of self-identity, the ideal body, and the stigmatization of obesity.
5. Identify strategies used by the food and nutrition industry to influence public opinion and consumption patterns as well as public policy on nutrition and food regulation.
6. Express and communicate ideas and opinions clearly in writing.

SOCIAL SCIENCES

SOCS 225 Statistical Analysis for Social Sciences (3) KCC AA/DS
3 hours lecture per week
Prerequisites: Qualification for ENG 100; Qualification for MATH 100 or higher level mathematics. Completion of a social sciences course with a grade of "C" or higher in PSY 100, a grade of "C" or higher in SOC 100, a grade of "C" or higher in ANTH 151, a grade of "C" or higher in ECON 130, a grade of "C" or higher in POLS 110, a grade of "C" or higher in FAMR 230, a grade of "C" or higher in GEOG 101, a grade of "C" or higher in GEOG 102, a grade of "C" or higher in GEOG 151, a grade of "C" or higher in JOUR 150, a grade of "C" or higher in WS 202 or other introductory 100-level social science courses, or consent of the instructor.

SOCS 225 uses statistical reasoning in the analysis of social science data. Topics covered include descriptive statistics, probability, parameter estimation, hypothesis testing, tests for independent and dependent measures, analysis of variance, correlation and regression, and nonparametric statistical tests. This course will also include computer-aided instruction.

Upon successful completion of SOCS 225, the student should be able to:

1. Explain and interpret various descriptive statistics.
2. Draw and interpret various graphs, such as frequency histograms, bar graphs, and cumulative relative frequency histograms.
3. Solve probability problems involving the concepts of independent events, mutually exclusive events, and conditional probability.
4. Calculate probabilities involving normal random variables.
5. Determine and interpret (for large samples) confidence interval estimates of population means and proportions.
6. For a variety of research designs, state the null and alternative hypotheses and select alpha.
7. For a variety of research designs, select the appropriate test statistic and analyze the data accordingly.
8. Estimate the statistical power for a variety of research designs and evaluate its acceptability.
9. Carry out computer-based data analyses using the following techniques: t test for two independent groups, t test for correlated samples, one-way between-groups analysis of variance (ANOVA), multiple comparisons, factorial between-groups ANOVA, one-way within-groups ANOVA and mixed designs, correlation, linear regression, and nonparametric tests.
10. Interpret advanced statistical procedures described in research articles.

SOCIOLOGY

SOC 100 Introduction to the Study of Sociology (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.

SOC 100 is an introduction to the scientific discipline of sociology. It will focus on key concepts, main theoretical perspectives, and research findings used by sociologists to explain the social world and social interaction. The course examines the fundamental components and institutions that make up the structure of human societies as well as the basic processes and direction of social change.

Upon successful completion of SOC 100, the student should be able to:

1. Identify the basic social institutions of a society in terms of structure, function, change, and interrelationships.
2. Evaluate arguments and ideas about human social behavior in relation to sociological theories.
3. Apply sociological theories and explanations to contemporary social processes and events.
4. Describe the societal roots of social processes and social problems and how societal and cultural processes affect individuals' behavior and thinking patterns.
5. Identify one's own values and behavior in relation to larger social forces.
6. Evaluate the process, assumptions, strengths, and limitations of the scientific method.
7. Critically evaluate social research data.
8. Express and communicate ideas and opinions clearly in writing.
9. Apply a global perspective when examining social processes and events.

SOC 214 Introduction to Race & Ethnic Relations (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.
Recommended Preparation: SOC 100.

SOC 214 focuses on race and ethnic relations in world perspective; social, economic and political problems associated with perception, existence, and accommodation of varying racial and ethnic groups within the wider society.

Upon successful completion of SOC 214, the student should be able to:

1. Identify the major ways in which "race" has been defined throughout human history.
2. Identify "races" and "ethnic groups".
3. Compare and contrast varying racial and ethnic groups that make up the population of the American society and discuss the diversity in backgrounds.
4. Describe the basic social processes that affect societies and individual behavior.
5. Give examples of the relationship of individuals and the social and cultural environment.
6. Evaluate predictions concerning the size and composition of the minority populations being studied for the future.
7. Describe how prejudice and discrimination may be related, or unrelated, to each other.
8. Identify the components of assimilation, including the less tangible aspects such as values, sentiments, and attitudes.
9. State ideas and opinions clearly in writing.
10. Define and give examples of each of the major patterns of intergroup relations, assimilation, pluralism, subjugation, segregation, expulsion, and annihilation.
11. Describe the theoretical perspectives that relate to the study of race and ethnic relations.
12. Apply a global perspective when examining race and ethnic relations.

SOC 218 Introduction to Social Problems (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.
Recommended Preparation: SOC 100.

SOC 218 focuses on theoretical and substantive survey of the nature and causes of social problems; selected problems will vary from semester to semester.

Upon successful completion of SOC 218, the student should be able to:

1. Apply critical thinking skills to evaluate social problems.
2. Evaluate proposed solutions to social problems.
3. Define sets of circumstances that become problematic for large segments of the population.
4. Identify attitudinal changes toward social problems.
5. Give examples of an objective approach to the observation and analysis of social problems in society.
6. Demonstrate a global perspective when examining social problems, issues and concerns.
7. Describe the theoretical perspectives that relate to the study of social problems.
8. Evaluate and explain thoughts, feelings and ideas relevant to selected social issues.

SOC 231 Introduction to Juvenile Delinquency (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.
Recommended Preparation: SOC 100.

SOC 231 covers the sociological analysis of the social realities of juvenile delinquency in contemporary societies, its nature, prevalence, etiology, treatment and future.

Upon successful completion of SOC 231, the student should be able to:

1. Define juvenile delinquency, in particular, socio-legal and statistical characterizations of that form of youthful deviance.
2. Explain the underlying, finite and multiple causes of juvenile delinquency which refer in particular to the sociogenic, psychogenic, and biogenic etiologies popularly offered in the sociological study of juvenile delinquency.
3. Give examples of official and unofficial reactions to youthful offenders, especially in light of victim and offender characteristics, Juvenile Justice System policies and operations, and community sensitivity to and reporting of the problem (victimization surveys) of delinquency.
4. Explain the Juvenile Justice System: its background, functions, interrelations, structure, and its evaluation in the prevention of juvenile

delinquency.
5. Give examples of the family as a malfunctioning institution and as a preventive institution.
6. Give examples of the school as a dysfunctional institution and as another preventive institution.
7. Identify the age/career stages in the development of a juvenile delinquent.
8. Give examples of the nature of delinquent gangs; their structure, functions, dynamics, and etiology.
9. Explain the class and sex variations of juvenile delinquents, especially in light of racism and sexism in the Juvenile Justice System.
10. Evaluate the varied sociological research methodologies and panel presentations.

SOC 251 Introduction to Sociology of the Family (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.
Recommended Preparation: SOC 100.

SOC 251 examines family patterns, mate selection, parent-child interaction, socialization of roles, legal sanctions, and trends in organization and functions. The theoretical and empirical bases are related to the students' experiences and observations.

Upon successful completion of SOC 251, the student should be able to:

1. Employ the sociological perspective and research methods in studying marriage and family.
2. Recognize the basic sociological theories and concepts that have been employed in the study of marriage and family.
3. Examine the origins of such basic institutions including their life cycles.
4. Identify diverse and universal forms of marriage and family and their impact on American societies.
5. Identify the major societal changes affecting marriage and family and their resultant institutional consequences.
6. Demonstrate awareness of family dysfunction and its impact on society.
7. Recognize the family's role in modern society, and speculate about the future of marriage and family as global institutions.

SOC 257 Sociology of Aging (3) KCC AA/DS and KCC AS/SS
3 hours lecture per week
Prerequisite(s): Qualification for ENG 100; qualification for MATH 24.
Recommended Preparation: SOC100.

SOC 257 is an overview of significant sociological perspectives, social issues, and empirical social science research pertaining to the phenomenon of aging in society.

Upon successful completion of SOC 257, the student should be able to:

1. Give examples of aging as a social phenomenon and not simply as a biological process.
2. Evaluate and interpret ageism and other social attitudes, values, and practices with respect to aging and their implication on the aging experience.
3. Identify global and diverse perspective in the understanding of social issues, problems, and concerns in aging society.
4. Identify fundamental concepts of aging issues and societal changes as they reflect demographic, economic, political, ethnic, family, health and long-terms care dynamics of aging society.
5. Differentiate between and evaluate major social gerontology theories to the explanation of again as a socio phenomenon.
6. Apply and interpret social science research findings in relation to societal roots of the aging experience.
7. Express and communicate ideas clearly in writing.

SPANISH

SPAN 101 Elementary Spanish I (4) KCC AA/HSL
3 hours lecture, 2 hours lab per week

SPAN 101 is an introduction to the sounds and basic structures of the Spanish language emphasizing the acquisition of speaking, writing, reading, and listening comprehension skills for communicative proficiency, and an appreciation of the essential elements of Hispanic culture in the context of Spanish-speaking countries.

Upon successful completion of SPAN 101, the student should be able to:

1. Produce the sounds of Spanish and read words with acceptable pronunciation.
2. Reproduce simple patterns of speech based on classroom models with acceptable pronunciation.

3. Respond orally to familiar simple conversational models to demonstrate communicative competency at a basic level.
4. Read aloud familiar materials with pronunciation comprehensible to a native-speaker.
5. Write phrases in Spanish that demonstrate appropriate use of present tense grammatical forms in familiar contexts.
6. Demonstrate knowledge of essential geography and basic concepts of Hispanic culture, and contrastive cultural practices in the context of six countries where Spanish is spoken.

SPAN 102 Elementary Spanish II (4) KCC AA/HSL
3 hours lecture, 2 hours lab per week
Prerequisite(s): A grade of "C" or higher in SPAN 101, or satisfactory score on language placement test, or instructor consent.

SPAN 102 is a continuation of SPAN 101 with further development of basic Spanish sentence structures, vocabulary, reading, oral and written communication skills and an enhanced appreciation of Hispanic culture.

Upon successful completion of SPAN 102, the student should be able to:

1. Reproduce patterns of speech based on classroom models with acceptable pronunciation.
2. Respond orally in natural conversation to demonstrate communicative competency.
3. Read aloud familiar materials with pronunciation comprehensible to a native-speaker.
4. Write simple sentences in Spanish that demonstrate appropriate use of grammatical forms in familiar contexts.
5. Demonstrate knowledge of basic concepts of Hispanic culture presented in class.

SPAN 201 Intermediate Spanish I (3) KCC AA/HSL
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in SPAN 102, or satisfactory score on language placement test, or instructor consent.

SPAN 201 is a continuation of SPAN 102. Students will refine basic language skills acquired in Beginning Spanish through reading, conversation, writing, listening, vocabulary development, and grammar review. Communicative practice with peers, instructor, native-speakers, and articulated language lab activities will develop confidence and fluency in written and oral expression. Cultural readings and presentations will enhance knowledge and appreciation of the presence and influence of the Spanish language and Hispanic culture in the world.

Upon successful completion of SPAN 201, the student should be able to:

1. Demonstrate through class discussion, conversation, and writing, the ability to read and understand short, nontechnical articles related to daily life, society, and Hispanic and American cultures.
2. Demonstrate through class discussion, conversation, and writing, the integration of the elements of vocabulary and grammatical structures of Spanish necessary to communicate orally and in writing on topics related to daily life, society, and Hispanic and American cultures.
3. Communicate orally on topics related to daily life, society, and Hispanic and American cultures with pronunciation comprehensible to a native speaker.
4. Demonstrate through class discussion, conversation, and writing, an understanding of the essentials of geography, history, culture, and society of Spain and Latin American countries.

SPAN 202 Intermediate Spanish II (3) KCC AA/HSL
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in SPAN 201, or satisfactory score on language placement test, or instructor consent.

SPAN 202 is a continuation of SPAN 201. Students will refine basic language skills acquired in Spanish 201 through reading, conversation, writing, listening, vocabulary development, and grammar review of increasing difficulty. Communicative practice with peers, instructor, native-speakers, and articulated language lab activities will develop confidence, control and fluency in written essays and oral expression of ideas about Hispanic culture and society.

Upon successful completion of SPAN 202, the student should be able to:

1. Demonstrate, through class discussion, conversation, and writing, the ability to read, understand, and talk about short, cultural articles related to society and Hispanic and American cultures.
2. Demonstrate, through class discussion, conversation, and writing one- to two-page essays about the integration of the elements of vocabulary and grammatical structures of Spanish necessary to communicate on most topics related to society and Hispanic and American cultures.

3. Communicate orally on topics related to society, and Hispanic and American cultures with pronunciation comprehensible to a native speaker.
4. Demonstrate through class discussion, conversation, and writing, an understanding of the essentials of history, culture and society of Spain and Latin American countries.

SPAN 210 Intensive Reading: Hispanic Culture (3)
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in SPAN 202, or instructor consent.

SPAN 210 emphasizes intensive reading, writing, and vocabulary development in Spanish at the high intermediate level. The course surveys the language, customs, and culture of Spanish-speaking countries and Hispanic communities in the US, including Hawai'i, with attention to regional similarities and differences, linguistic variation, and contributions to contemporary culture, including music and film. This course is appropriate for native-speakers and heritage-speakers of Spanish, and recommended for students considering a minor certificate or major in Spanish at UH Manoa.

Upon successful completion of SPAN 210, through intensive reading in Spanish, and vocabulary development, the student should be able to:

1. Identify the nationality and significant cultural contributions to art, literature, food, music, and film of Spanish speakers of the Caribbean, Spain, Central America, three regions of South America, and Hispanics living in the United States including Hawai'i.
2. Explain how the history and geography of a particular Spanish-speaking region influenced the culture and cultural contributions from that region.
3. Analyze and evaluate the theme and style of representative literary excerpts and how they represent an expression of the culture, and historical/political/social/geographical context of a particular region or people.
4. Demonstrate in writing and discussion an understanding of the uniqueness of each cultural group.
5. Communicate thoughts, knowledge, ideas, and opinions using Intermediate Level Spanish, orally and in writing, with sufficient skill to be understood by a native-speaker.
6. Explain in Spanish, orally and in writing, the basics of some of the important contemporary political issues facing Spanish-speaking societies especially with respect to the United States: e.g. Mexican immigration to the US, the US bombing of Vieques in Puerto Rico, the trade embargo with Cuba, drug wars in the Andean regions, destruction of the rain forest, etc.

SPAN 250 Latin American Literature & Culture (3) KCC AA/DL
3 hours lecture per week
Prerequisite(s): A grade of "C" or higher in SPAN 202 or equivalent or permission of instructor.

SPAN 250 is a study of selected excerpts from works of Latin American literature from the pre-Columbian era to the present, focusing on how the literature represents the history, culture and society of Spanish-speaking Latin American countries and peoples. Taught in Spanish at the high intermediate level, this course is especially recommended for students considering a Spanish certificate or major, heritage speakers, and qualified students who seek back credits in Spanish.

Upon successful completion of SPAN 250, the student should be able to:

1. Consider a work of literature as a reflection of its cultural milieu and compare that milieu with his/her own.
2. Analyze and evaluate the theme and style of representative literary excerpts and how they represent an expression of the cultural, historical, social, and geographical contexts of a particular Latin American region or people; especially with respect to Identity, Gender, Social Justice/Human Rights, Globalization, and Environment.
3. Describe in writing and discussion the uniqueness and diversity among cultural and national groups of Latin America.
4. Describe in writing and discussion the similarities of theme, style, and purpose that characterize Latin American literature.
5. Participate in discussions about Latin American literature and culture using appropriate vocabulary, grammar, reading, speaking, and writing skills.
6. Communicate thoughts, background knowledge, ideas, and opinions using Intermediate level Spanish, orally and in writing, with sufficient skill to be understood by a native speaker.
7. Explain in writing the need for literary evidence to support opinions and ideas regarding a literary work.
8. Recognize the universality in human experience, as well as the qualities that make a particular ethnic or cultural group distinct.
9. Explain the importance of selected major Latin American authors, from the Pre-Columbian era to the present, as literary figures and representatives of their culture and society.

SPEECH

SP 151 Personal and Public Speech (3) KCC AA/OC and KCC AA/DA
3 hours lecture per week
Recommended preparation: Qualification for ENG 100, ENG 160, or ESL 100.

SP 151 emphasizes the development of oral communication skills vital in career and personal life. Focus is on principles and skills of effective interpersonal communication, small group discussions, and public speeches.

Upon successful completion of SP 151, the student should be able to:

1. Apply principles of effective verbal and nonverbal communication in interpersonal, small group, and public speaking situations.
2. Identify strengths and weaknesses in your own and others' interpersonal, group, and public communication.
3. Define and demonstrate the basic principles of verbal and nonverbal communication in an interview, small group discussion/presentation, and public speeches.
4. Analyze an audience and adapt a message to listeners in various communication situations.
5. Organize and formally outline ideas with appropriate and adequate supporting materials in an interview, small group, and informative and persuasive speeches.
6. Develop critical listening skills and demonstrate appropriate audience behaviors in various communication situations.
7. Develop self-confidence and competence as a personal and public communicator.

SP 181 Interpersonal Communication (3) KCC AA/DS and KCC AA/OC
3 hours lecture per week
Recommended Preparation: Qualification for ENG 100, ENG 160, or ESL 100.

SP 181 explores the theories and practical skills to be a competent communicator in person-to-person situations. Topics include perception, verbal and nonverbal communication, emotion, listening, and conflict management. Students work individually, in pairs, and in small groups to expand their knowledge and understanding of the role communication plays in the development and maintenance of interpersonal relationships in personal, social, and professional contexts.

Upon successful completion of SP 181, the student should be able to:

1. Describe the elements of the communication process.
2. Analyze elements of the process of perception.
3. Describe empathic listening.
4. Analyze nonverbal messages.
5. Describe effective communication strategies in conflict situations.
6. Describe assertive communication strategies in intimidating situations.
7. Discuss gender and cultural differences in interpersonal communication.
8. Write clearly about topics related to interpersonal communication.
9. Work individually and in small groups to present information to others.

SP 231 Performance of Literature (3) KCC AA/DA and KCC AA/OC
3 hours lecture per week
Recommended preparation: Qualification for ENG 100.

SP 231 is an introduction to the study of literature through performance. The course helps students to see the performance of literature as a method of increasing literary understanding and enjoyment, both for the performer and the audience. Students write literary analyses and present performances to learn how to use performance as a means to study literature.

Upon successful completion of SP 231, the student should be able to:

1. Define "performance".
2. Define specific terminology concerning interpretation and literary study.
3. Identify performance conventions practiced by the solo performer of literary texts.
4. Evaluate the literary merits of a text.
5. Evaluate artistic merits of a performance.
6. Demonstrate the essentials of character analysis.
7. Render in performance the intellectual, emotional and literary merits of a text.
8. Perform a literary text with appropriate use of vocal characteristics and body language.

9. Function as a critic of performed literature as well as the literary text itself.
10. Incorporate memory techniques in presentations.
11. Recognize the importance of giving and obtaining student feedback.
12. Evaluate the performance of others.

SP 233 Oral Traditions of Storytelling (3) KCC AA/DA
3 hours lecture per week
Recommended Preparation: ENG 100 or ESL 100.

SP 233 introduces the student to the oral traditions of storytelling with emphasis on the historical, cultural, and performance perspectives. Students present stories and learn how to analyze their forms.

Upon successful completion of SP 233, the student should be able to:

1. Select and share stories from cultures that follow oral traditions.
2. Analyze stories in terms of character, plot development, setting, cultural context and theme.
3. Complete an oral history study.
4. Complete a critical self-assessment.
5. Present stories with appropriate use of body and voice.
6. Incorporate memory techniques in presentations.
7. Evaluate the performance of others.

SP 251 Principles of Effective Public Speaking (3) KCC AA/OC and KCC AA/DA and KCC AS/AH
3 hours lecture per week
Recommended Preparation: SP 151, ENG 100, ENG 160, or ESL 100.

SP 251 focuses on speech composition and delivery. Emphasis is on critical thinking, clear organization, research skill, appropriate verbal and visual support, and lively delivery. Students present speeches, complete self-analysis papers of their speeches, critique presentations, and evaluate reasoning on important topics.

Upon successful completion of SP 251, the student should be able to:

1. Analyze an audience and apply principles to topic selection.
2. Develop, present, and defend positions on important issues.
3. Organize and formally outline a variety of speeches.
4. Support ideas using a variety of evidence and research.
5. Present ideas with appropriate use of body and voice.
6. Provide oral and written feedback to other speakers.
7. Describe a speaker's ethical responsibilities.
8. Identify speech strengths and areas to improve through written self-analysis of presentations.

THEATER

THEA 101 Introduction to Drama and Theater (3) KCC AA/DA and KCC AS/AH
3 hours lecture per week
Recommended Preparation: Credit in, concurrent enrollment in, or qualification for ENG 100, ENG 160, ESL 100.
Comment: Tickets for performances may cost approximately $5 - $20.

THEA 101 is a study of selected major forms of World drama, both as literary works and performed theatrical productions. Students will discuss, analyze, and participate in the artful transformation of plays, from “page to stage.”

Upon successful completion of THEA 101, the student should be able to:

1. Explain the similarities and differences between the play as literature and the play as performance.
2. Demonstrate how the basic concepts of dramatic form and structure (such as plot, character, theme, language and spectacle) are realized in selected plays for a particular audience.
3. Demonstrate how the basic elements of theatrical performance (such as acting, directing, designing, style, set, props, lighting, sound, costumes and make-up) are realized in selected plays for a particular audience.
4. Identify a play as a reflection of its cultural milieu, and compare that milieu with his or her own.

5. Examine a written play or performance from many points of view.
6. Express opinions and responses to plays, both in discussion and in writing, that are supported by the literary text and the performed work.
7. Demonstrate knowledge of the theatrical process by participating in the artful transformation of an original scene, from “page to stage.”

THEA 221 Beginning Acting I (3) KCC AA/DA and KCC AA/OC
3 hours lecture per week
Comment: THEA 221 is repeatable for a maximum of six credits.

THEA 221 is an acting course designed for the beginning student. Concentration will be on voice, relaxation, body awareness, and freedom from self-consciousness. Through theater games, improvisations, monologues and scene work, students will learn to analyze, appreciate and perform dramatic literature. They will also learn to critique the performances of others.

Upon successful completion of THEA 221, the student should be able to:

1. Demonstrate progress in developing imagination, sensory awareness, listening, concentrating and commitment, culminating in believable character portrayal in a wide variety of improvs and in a scripted scene.
2. Utilize vocal control in range, intensity, resonance, phrasing and inflection to convey a variety of meanings and emotions in improvs and a scripted scene.
3. Develop the bodily mechanism for increased flexibility and ability to project a wide range of physical expressions in improvs and a scripted scene.
4. Explain, in writing, the essentials of character analysis, using the organizational patterns of chronological, spatial, cause and effect, and problem/solution.
5. Evaluate the literary merits of a dramatic text.
6. Evaluate the artistic merit of a performance by fellow actors by applying the concepts and techniques learned in class to give descriptive, constructive, and critical feedback with "performance etiquette" for purposes of improvement.
7. Develop a professional attitude of rehearsal dependability by avoiding tardiness and absenteeism, and following through on assignments and accepting direction and constructive criticism cooperatively and cheerfully from classmates and the teacher/director.

THEA 222 Beginning Acting II (3) KCC AA/DA and KCC AA/OC
3 hours lecture per week
Prerequisite(s): THEA 221 or consent of instructor.
Comment: Mandatory rehearsal. THEA 222 is repeatable for a maximum of six credits.

THEA 222 is an acting course designed as a continuation of THEA 221. Students will utilize the knowledge of scene study and performance skills they have learned in a staged production.

Upon successful completion of THEA 222, the student should be able to:

1. Demonstrate knowledge of the audition and rehearsal process by adherence to the actor/director contract, at satisfactory levels.
2. Utilize the techniques learned in THEA 221 to analyze a script.
3. Utilize the techniques learned in THEA 221 to analyze a character to be portrayed.
4. Utilize the techniques learned in THEA 221 to artistically and creatively use body and voice in portraying a believable character, from a published play, for an audience.
5. Demonstrate a mastery of the elements of play production through constructive and competent assistance with set construction, lighting, costumes, make-up, marketing and promotion, and management of a published play in production for an audience.

THEA 240 Stagecraft (3) Inactive
6 hours lecture/lab per week
Comment: Mandatory rehearsal. THEA 240 is repeatable for a maximum of six credits. THEA 240 is currently inactive.

THEA 240 is an exploration of the materials, techniques, and conventions of stage construction. Students will utilize the knowledge of basic set design, construction, and lighting skills they learn to construct a set for a staged production.

Upon successful completion of THEA 240, the student should be able to:
1. Demonstrate set design and construction as an integral part of the creative process of the theatre.
2. Work in a variety of roles in theatrical production.
3. Utilize the basic skills of play production for an audience, through imaginative and constructive assistance with the set, lighting, and costumes of a published play.

4. Utilize basic stagecraft skills, equipment, techniques, and terminology in class and in the production process of theatre events.
5. Assess the technical aspects of theatre by attending and writing reviews of two local theatre productions, stressing the technical aspects of the production.
6. Complete in-class stagecraft projects in a timely manner.
7. Work productively and effectively as a member of a team.

WOMEN'S STUDIES

WS 202 Psychology of Women (3) KCC AA/DS

3 hours lecture per week
Prerequisite(s): PSY 100; qualification for ENG 100; qualification for MATH 24.
Comment: WS 202 is cross-listed as PSY 202.

WS 202 is a survey of contemporary theoretical and research issues relevant to the psychological development and functioning of women. Topics covered in WS 202 include the following: gender differences in biology, personality, behavior and development. Multicultural perspectives are emphasized.

Upon successful completion of WS 202, the student should be able to:

1. Describe the nature of psychology of women as a discipline.
2. Compare and contrast the major perspectives of psychology-—behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic, and sociocultural—so as to demonstrate how these perspectives relate to the psychology of women.
3. Identify overarching themes and persistent questions in psychology of women, by focusing on theoretical perspectives regarding the development of functioning of women, as well as by demonstrating knowledge regarding contemporary psychological research on gender differences in biology, personality, behavior, and development.
4. Use critical thinking to analyze material related to the psychology of women, by identifying and evaluating the source, context, and credibility of information, evaluating popular media reports of psychological research related to gender, and by distinguishing amongst assumptions, emotional appeals, speculations, and defensible evidence.
5. State how psychological principles can be used to explain social issues related to gender and inform public policy.
6. State the necessity for ethical behavior in all aspects of the science and practice of psychology.
7. Communicate effectively, by listening accurately and actively, and by articulating ideas thoughtfully and purposefully.
8. Collaborate effectively, by working with groups to complete projects and by interacting effectively and sensitively with people from diverse backgrounds and cultural perspectives.
9. Apply psychological principles to promote personal development by incorporating feedback for improved performance and by reflecting on one's experiences, thereby finding meaning in them.

ZOOLOGY

ZOOL 141 Human Anatomy and Physiology I (3) KCC AA/DB and KCC AS/NS

3 hours lecture per week
Recommended Preparation: CHEM 100 or higher level chemistry or biochemistry; BIOL 101 or higher level biology or zoology.

ZOOL 141, Human Anatomy and Physiology I covers the structure and function of the human body which includes a study of its embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: body orientation, chemical level, cellular level, tissue level, integumentary, bone tissue, skeletal, joints, muscular tissue, muscular system, nervous tissue, spinal cord & nerves, brain, cranial nerves, neural integration and special senses.

Upon successful completion of ZOOL 141, the student should be able to:

1. Recall the required anatomical structures and physiological functions of the body systems covered in the course.

ZOOL 141L Human Anatomy and Physiology Lab I (1) KCC AA/DY and KCC AS/NS
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in ZOOL 141.
Recommended Preparation: CHEM 100 or higher level chemistry or biochemistry; 100 level or higher course in biology or zoology.

ZOOL 141L, Human Anatomy and Physiology Laboratory I covers the structure and function of the human body, which includes study and experimentation regarding embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: body orientation, chemistry, cells, tissues, integumentary system, bone tissue, skeletal system, joints, muscular tissue, muscular system, nervous tissue, spinal cord and nerves, brain, cranial nerves, and special senses.

Upon successful completion of ZOOL 141L, the student should be able to:

1. Describe general human gross, systemic, histological, and cellular anatomy through the use of models, computer images, palpation, observation, and dissections.
2. Use basic chemical principles important to operations of the body.
3. Identify the functions of the various parts of a microscope.
4. Employ the scientific method to study, measure, analyze, understand, and report on physiological systems.
5. Use a range of technological instruments/computers to measure and analyze physiological systems.
6. Perform clinical tests to assess the condition of physiological systems.

ZOOL 142 Human Anatomy and Physiology II (3) KCC AA/DB and KCC AS/NS
3 hours lecture per week
Prerequisite(s): ZOOL 141.
Recommended Preparation: CHEM 100 or higher level chemistry or biochemistry; 100 level or higher course in biology or zoology.

ZOOL 142 covers the structure and function of the human body, which includes a study of its embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: autonomic nervous, endocrine, blood, heart, vessels and hemodynamics, lymphatic and immune, respiratory, digestive, metabolism, urinary, fluids, electrolytes, acid/base homeostasis, reproductive, development and heredity.

Upon successful completion of ZOOL 142, the student should be able to:

1. Recall the required anatomical structures and physiological functions of the body systems covered in the course.

ZOOL 142L Human Anatomy and Physiology Laboratory II (1) KCC AA/DY and KCC AS/NS
3 hours lab per week
Prerequisite(s): Credit or concurrent enrollment in ZOOL 142.
Recommended Preparation: CHEM 100 or higher level chemistry or biochemistry; 100 level or higher course in biology or zoology.

ZOOL 142L, focuses on the study of the structure and function of the human body which includes examination and experimentation regarding embryology, gross anatomy, microanatomy (histology), physiology, pathology, and homeostatic relationships with regards to the following areas: autonomic nervous, endocrine, blood, heart, vessels & hemodynamics, lymphatic & immune, respiratory, digestive, metabolism and nutrition and body composition (energy balance), urinary, fluids, electrolytes, acid/base homeostatsis, reproductive, development and heredity.

Upon successful completion of ZOOL 142L, the student should be able to:

1. Describe general human gross, systemic, histological, and cellular anatomy through the use of models, computer images, palpation, observation, and dissections
2. Use basic chemical principles important to operations of the body.
3. Use a microscope to identify cells of the body.
4. Employ the scientific method to study, measure, analyze, understand, and report on physiological systems.
5. Use a range of technological instruments/computers to measure and analyze physiological systems.
6. Perform clinical tests to assess the condition of physical and physiological systems.
7. Employ critical thinking and knowledge of common mechanisms of physiological operation to understand how systems function and homeostasis.

ZOOL 200 Marine Biology (3) KCC AA/DB and KCC AS/NS
3 hours lecture per week

ZOOL 200 is a comprehensive overview of marine life in Hawai‘i and around the world inclusive of taxonomy, body structure and function, geographical distribution and ecological relationships. The physical and chemical natures of varying marine environments are characterized and the inevitable human interactions and impact are examined.

Upon successful completion of ZOOL 200, the student should be able to:

1. List the physical and chemical characteristics of marine environments and how they impact marine life.
2. Describe the diversity of marine organisms and what role these differences play in their survival.
3. Identify interactions between physical structure and biological function of marine life.
4. Categorize taxonomic similarities and differences of marine organisms.
5. Illustrate and provide examples of the ecological role of and relationships between marine organisms.
6. Evaluate the affects of human activities that alter the marine environment and how they impact marine life.
7. As an individual citizen, should be able to locate and comprehend resources of information that aid in making informal decisions on marine-related issues.
8. Demonstrate a fundamental knowledge of the basic approaches to scientific problem solving.

ZOOL 200L Marine Biology Laboratory (1) KCC AA/DY
3 hours lab per week
Corequisite(s): ZOOL 200.

The laboratory and field activities in ZOOL 200L provide an overview of marine life in Hawai`i inclusive of taxonomy, body structure and function, geographical distribution and ecological relationships. The physical and chemical features of Hawai‘i's varied marine environments are also examined.

Upon successful completion of ZOOL 200L, the student should be able to:

1. List key characteristics of seawater and bottom substrate, and describe how they affect the distribution of marine life.
2. Demonstrate the use of dichotomous keys to identify marine plants and animals.
3. Evaluate the diverse characteristics of marine plants and animals in Hawai`i by their taxonomic classification.
4. Develop proper field study techniques including collection, transect and quadrat sampling.
5. Design and conduct valid scientific inquiry, including statement of problem and hypothesis, experimental procedures, collection and analysis of data, and drawing conclusions.